Day-Brite

CFI

by signify

Industrial

RBX LED high bay

10,000, 15,000, or 20,000lm

Day-Brite / CFI RBX LED high bays have the familiar look and feel of traditional high bay luminaires. Available with acrylic or aluminum reflectors and a variety of lumen packages and color temperatures, the RBX is ideal for retail, industrial, or commercial applications.

Project:

Location:

Cat.No:

Type:

Lamps: Qty:

Notes:

Ordering guide

Example: RBX15L840-UNV-WT ARR22L

Family	Lumens	Color Temperature	Voltage	Finish	Options	Optics
RBX	**10L** 10,000 nominal delivered lumens **15L** 15,000 nominal delivered lumens **20L** 20,000 nominal delivered lumens	**827** 2700K (CRI 80) **830** 3000K (CRI 80) **835** 3500K (CRI 80) **840** 4000K (CRI 80) **927** 2700K (CRI 90) **930** 3000K (CRI 90)	**UNV** Universal voltage 120-277V **120** 120V **208** 208V **240** 240V **277** 277V **347** 347V	**WT** Matte white **BK** Matte black **ST** Satin aluminum	**EMLED** Emergency Battery **SP1** 10kV Surge Protector **WSF** Wired Single Fuse	**ARR16S** Open 16" clear acrylic reflector **ARR16SL** Open 16" white acrylic reflector **ARR22S** Open 22" clear acrylic short reflector **ARR22SL** Open 22" white acrylic short reflector **ARR22** Open 22" clear acrylic standard reflector **ARR22L** Open 22" white acrylic standard reflector **A22R** Open 22" anodized aluminum reflector **BAC**[1] Meets the requirements of the Buy American Act of 1933 (BAA)

1 Failure to properly select the "BAC" suffix could result in you receiving product that is not BAA compliant product with no recourse for an RMA or refund. This BAC designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies.

2 Consult Signify to confirm whether specific accessories are BAA-compliant.

Accessories[2] (order separately)

16CL	16" Conical acrylic lens and spring clamp band
16DL	16" Drop acrylic lens and spring clamp band
16FL	16" Flat acrylic lens and spring clamp band
22CL	22" Conical acrylic lens and spring clamp band
22DL	22" Drop acrylic lens and spring clamp band
22FL	22" Flat acrylic lens and spring clamp band
HCH6-3/4-SC	6' Aircraft cable with straight cord
HCH6-3/4-SC-5W	6' Aircraft cable with 5-wire straight cord
HP12-6	Hook with 6' cord and 120V plug (NEMA L5-15P)
HP27-6	Hook with 6' cord and 277V plug (NEMA L7-15P)
WGA16	16" Wire guard (Not for use with drop lens)
WGA22	22" Wire guard (Not for use with drop lens)

General Notes

- All options are factory installed.
- All accessories are field installed.
- Ballast assembly and optics are ordered and shipped separately.
- For maximum lifetime benefit, luminaires should not be cycled on/off more than 2 to 4 times per day. Dimming does not adversely affect lifetime.
- Many luminaire components, such as reflectors, refractors, lenses, sockets, lamp-holders, and LEDs are made from various types of plastics which can be adversely affected by airborne contaminants. If sulfur based chemicals, petroleum based products, cleaning solutions, or other contaminants are expected in the intended area of use, consult factory for compatibility.

Predicted L70 Lifetime

At maximum ambient > 100,000 hours (based upon LED manufacturer's supplied LM-80 data and in-situ laboratory testing)

RBX LED round high bay

10,000, 15,000, or 20,000 lumens

Application

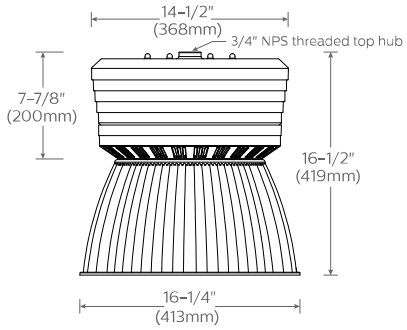
- This luminaire is ideal for retail, industrial, commercial, or other large indoor areas.

Construction/Finish

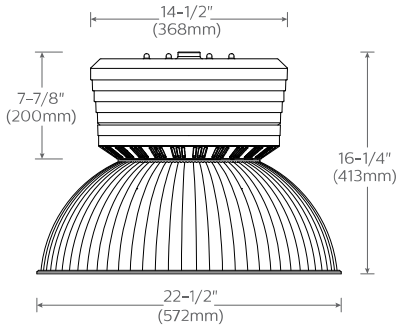
- Die cast aluminum housing provides excellent thermal transfer to extend component life.
- Clear acrylic refractor or white acrylic reflector options available to provide up to 15% uplight.
- Anodized aluminum reflector option available for downlight only.
- Optional bottom lens enclosures available for dust or glare control.
- ¾" NPS top hub for easy hook or stem mounting. **Note:** For areas where luminaires are subject to high impact (gymnasiums, etc), rigid pendant hanging is not suggested. Use hook or cable/chain assembly for mounting in these areas.
- Textured polyester powder finish for excellent impact and corrosion resistance.
- LED light engines and drivers are field replaceable.
- 5 Year Limited Warranty.
- Components are RoHS compliant.
- Dimming drivers are standard. Control is 0-10V DC.
- Optional integral emergency backup.
- Listed by ETL to meet UL 1598 standards for damp location -20°C to 40°C ambient (10L & 15L) -20°C to 30°C ambient (20L & EMLED).

Dimensions

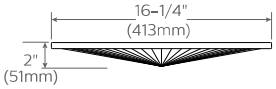
16" standard acrylic



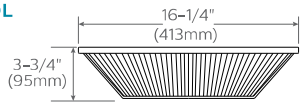
22" short acrylic



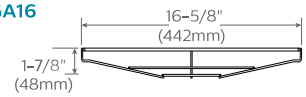
16CL



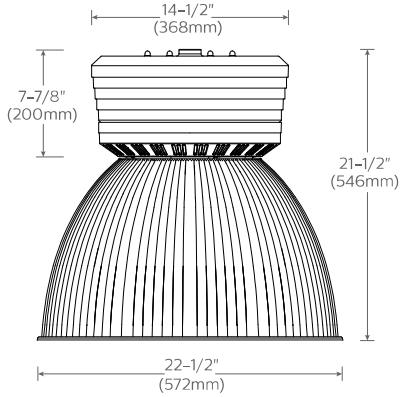
16DL



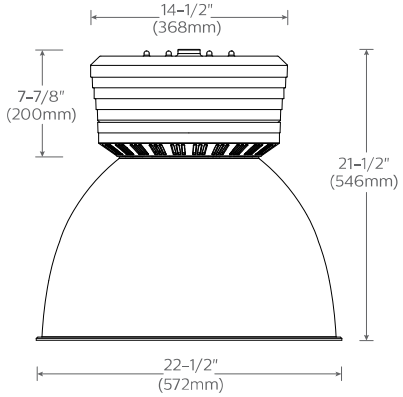
WGA16



22" standard acrylic



22" aluminum



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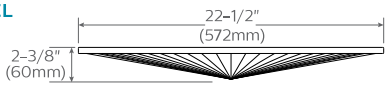

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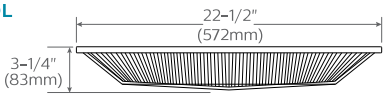
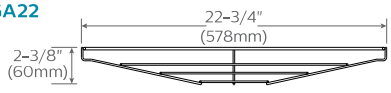


WGA22



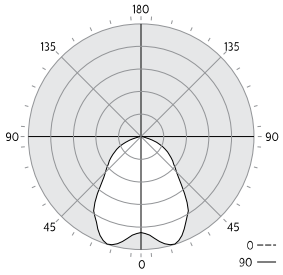
RBX LED round high bay

10,000, 15,000, or 20,000 lumens

LED round high bay RBX, 10,000 nominal delivered lumens, Open 16" clear acrylic reflector

Catalog No. RBX10L840-UNV-WT-ARR16S

Report no: 36830



Spacing criterion: 1.3
Lamp: LED
Output lumens: 11594 lm

Input watts: 87
Efficacy: 134 lm/W

Comparative yearly lighting energy cost per 1000 lumens **– $1.79** based on 3000 hrs. and $.08 pwr KWH.

The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candela distribution

Vertical Angle	Horizontal Angle 0°	45°	90°	-45°
0	4455	4455	4455	4455
5	4600	4600	4600	4600
15	5206	5206	5206	5206
25	4734	4734	4734	4734
35	3743	3743	3743	3743
45	2338	2338	2338	2338
55	1711	1711	1711	1711
65	1116	1116	1116	1116
75	379	379	379	379
85	76	76	76	76
95	44	44	44	44
105	54	54	54	54
115	42	42	42	42
125	33	33	33	33
135	33	33	33	33
145	28	28	28	28
155	20	20	20	20
165	14	14	14	14
175	9	9	9	9

Light Distribution

Degrees	Lumens	% Luminaire
0-30	4090	35.3
0-40	6390	55.1
0-60	9744	84.0
0-90	11359	98.0
90-120	148	1.3
90-130	178	1.5
90-150	221	1.9
90-180	235	2.0
0-180	11594	100.0

Average Luminance

Angle	End	45°	Cross
45	14897	12710	14897
55	11398	9431	11398
65	8045	6436	8045
75	3077	2366	3077
85	730	534	730

Coefficients of Utilization

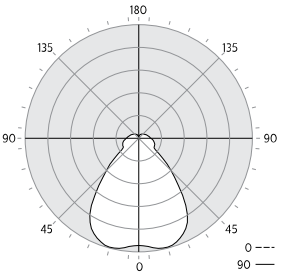
EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

Ceiling (pcc)		80%			70%			50%	
Wall (pw)		70	50	30	70	50	30	50	30
RCR		Zonal cavity method - Effective floor reflectance = 20%							
Room Cavity Ratio	0	119	119	119	116	116	116	110	110
	1	110	106	102	107	103	100	99	96
	2	101	94	88	98	92	86	88	83
	3	93	83	76	90	82	75	79	73
	4	86	75	67	83	73	66	71	64
	5	79	67	59	77	66	59	64	57
	6	74	61	53	72	60	52	58	51
	7	69	56	48	67	55	47	53	46
	8	64	51	43	62	51	43	49	42
	9	60	47	40	59	47	39	45	39
	10	56	44	36	55	43	36	42	36

LED round high bay RBX, 10,000 nominal delivered lumens, Open 16" white acrylic refractor

Catalog No. RBX10L840-UNV-WT-ARR16SL

Report no: 36836



Spacing criterion: 1.3
Lamp: LED
Output lumens: 11611

Input watts: 87
Efficacy: 134 lm/W

Comparative yearly lighting energy cost per 1000 lumens **– $1.79** based on 3000 hrs. and $.08 pwr KWH.

The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candela distribution

Vertical Angle	Horizontal Angle 0°	45°	90°	-45°
0	4275	4275	4275	4275
5	4337	4337	4337	4337
15	4496	4496	4496	4496
25	4203	4203	4203	4203
35	3276	3276	3276	3276
45	1824	1824	1824	1824
55	818	818	818	818
65	698	698	698	698
75	643	643	643	643
85	539	539	539	539
95	438	438	438	438
105	375	375	375	375
115	316	316	316	316
125	267	267	267	267
135	226	226	226	226
145	188	188	188	188
155	148	148	148	148
165	100	100	100	100
175	37	37	37	37

Light Distribution

Degrees	Lumens	% Luminaire
0-30	3613	31.1
0-40	5626	48.5
0-60	7831	67.4
0-90	9784	84.3
90-120	1190	10.3
90-130	1431	12.3
90-150	1725	14.9
90-180	1828	15.7
0-180	11611	100.0

Average Luminance

Angle	End	45°	Cross
45	11623	9917	11623
55	5453	4512	5453
65	5032	4025	5032
75	5227	4019	5227
85	5203	3804	5203

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

Ceiling (pcc)		80%			70%			50%	
Wall (pw)		70	50	30	70	50	30	50	30
RCR		Zonal cavity method - Effective floor reflectance = 20%							
Room Cavity Ratio	0	115	115	115	111	111	111	102	102
	1	105	100	96	100	96	92	89	86
	2	96	88	82	92	85	79	79	74
	3	89	79	71	85	76	69	71	65
	4	82	71	63	78	68	61	64	58
	5	76	64	56	73	62	54	58	52
	6	71	58	50	68	57	49	53	47
	7	66	53	45	63	52	44	49	42
	8	62	49	41	59	48	40	45	39
	9	58	45	38	56	44	37	42	36
	10	54	42	35	52	41	34	39	33

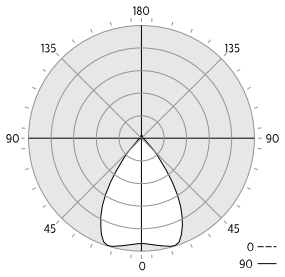
RBX LED round high bay

10,000, 15,000, or 20,000 lumens

LED round high bay RBX, 15,000 nominal delivered lumens, Open 22" clear acrylic standard reflector

Catalog No. RBX15L840-UNV-WT-ARR22

Report no: 35643



Spacing criterion:	1.1	Input watts:	132
Lamp:	LED	Efficacy:	130 lm/W
Output lumens:	17066 lm		

Comparative yearly lighting energy cost per 1000 lumens – **$1.85** based on 3000 hrs. and $.08 pwr KWH.

The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candela distribution

Vertical Angle	Horizontal Angle 0°	45°	90°	-45°
0	11852	11852	11852	11852
5	12005	12005	12005	12005
15	12623	12623	12623	12623
25	10860	10860	10860	10860
35	6011	6011	6011	6011
45	1906	1906	1906	1906
55	644	644	644	644
65	374	374	374	374
75	222	222	222	222
85	131	131	131	131
95	84	84	84	84
105	86	86	86	86
115	96	96	96	96
125	112	112	112	112
135	143	143	143	143
145	172	172	172	172
155	232	232	232	232
165	222	222	222	222
175	243	243	243	243

Light Distribution

Degrees	Lumens	% Luminaire
0-30	9648	56.5
0-40	13392	78.5
0-60	15520	90.9
0-90	16275	95.4
90-120	281	1.6
90-130	382	2.2
90-150	601	3.5
90-180	791	4.6
0-180	17066	100.0

Average Luminance

Angle	End	45°	Cross
45	6293	5349	6293
55	2213	1824	2213
65	1384	1103	1384
75	921	706	921
85	642	469	642

Coefficients of Utilization

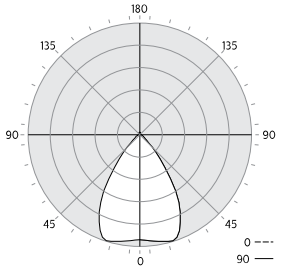
EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

Ceiling (pcc)		80%			70%			50%	
Wall (pw)		70	50	30	70	50	30	50	30
RCR		Zonal cavity method - Effective floor reflectance = 20%							
Room Cavity Ratio	0	118	118	118	115	115	115	109	109
	1	111	108	105	108	105	102	100	98
	2	104	99	94	102	97	92	92	89
	3	98	91	85	96	89	84	85	81
	4	92	84	77	90	82	76	79	74
	5	87	77	71	85	76	70	74	68
	6	82	72	65	80	71	64	69	63
	7	77	67	60	75	66	59	64	58
	8	73	62	56	71	61	55	60	54
	9	69	58	52	68	58	51	56	51
	10	65	55	48	64	54	48	53	47

LED round high bay RBX, 20,000 nominal delivered lumens, Open 22" clear acrylic standard reflector

Catalog No. RBX20L840-UNV-WT-ARR22

Report no: 36194



Spacing criterion:	1.1	Input watts:	159
Lamp:	LED	Efficacy:	127 lm/W
Output lumens:	20122 lm		

Comparative yearly lighting energy cost per 1000 lumens – **$1.89** based on 3000 hrs. and $.08 pwr KWH.

The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candela distribution

Vertical Angle	Horizontal Angle 0°	45°	90°	-45°
0	13870	13870	13870	13870
5	14041	14041	14041	14041
15	14610	14610	14610	14610
25	12686	12686	12686	12686
35	7133	7133	7133	7133
45	2349	2349	2349	2349
55	773	773	773	773
65	455	455	455	455
75	268	268	268	268
85	163	163	163	163
95	105	105	105	105
105	105	105	105	105
115	118	118	118	118
125	137	137	137	137
135	174	174	174	174
145	209	209	209	209
155	280	280	280	280
165	268	268	268	268
175	293	293	293	293

Light Distribution

Degrees	Lumens	% Luminaire
0-30	11232	55.8
0-40	15661	77.8
0-60	18238	90.6
0-90	19157	95.2
90-120	346	1.7
90-130	468	2.3
90-150	735	3.7
90-180	965	4.8
0-180	20122	100.0

Average Luminance

Angle	End	45°	Cross
45	7754	6590	7754
55	2659	2191	2659
65	1684	1343	1684
75	1112	853	1112
85	797	582	797

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

Ceiling (pcc)		80%			70%			50%	
Wall (pw)		70	50	30	70	50	30	50	30
RCR		Zonal cavity method - Effective floor reflectance = 20%							
Room Cavity Ratio	0	118	118	118	115	115	115	108	108
	1	111	108	105	108	105	102	100	98
	2	104	98	94	102	96	92	92	89
	3	98	90	85	95	89	83	85	81
	4	92	83	77	90	82	76	79	74
	5	87	77	70	85	76	70	73	68
	6	82	71	65	80	70	64	68	63
	7	77	66	60	75	65	59	64	58
	8	73	62	55	71	61	55	60	54
	9	69	58	51	67	57	51	56	50
	10	65	54	48	64	54	48	53	47

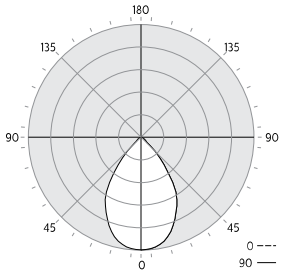
RBX LED round high bay

10,000, 15,000, or 20,000 lumens

LED round high bay RBX, 15,000 nominal delivered lumens, Open 22" anodized aluminum reflector

Catalog No. RBX15L840-UNV-WT-A22R

Report no: 35651



Spacing criterion:	1.0	Input watts:	132
Lamp:	LED	Efficacy:	108 lm/W
Output lumens:	14,247 lm		

Comparative yearly lighting energy cost per 1000 lumens – $2.22 based on 3000 hrs. and $.08 pwr KWH.

The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candela distribution

Vertical Angle	Horizontal Angle 0°	45°	90°	-45°
0	11765	11765	11765	11765
5	11677	11677	11677	11677
15	10816	10816	10816	10816
25	8706	8706	8706	8706
35	5768	5768	5768	5768
45	2076	2076	2076	2076
55	553	553	553	553
65	266	266	266	266
75	104	104	104	104
85	15	15	15	15
95	0	0	0	0
105	0	0	0	0
115	0	0	0	0
125	0	0	0	0
135	0	0	0	0
145	0	0	0	0
155	0	0	0	0
165	1	1	1	1
175	2	2	2	2

Light Distribution

Degrees	Lumens	% Luminaire
0- 30	8124	57.0
0- 40	11668	81.9
0- 60	13845	97.2
0- 90	14247	100.0
90-120	0	0.0
90-130	0	0.0
90-150	0	0.0
90-180	0	0.0
0- 180	14247	100.0

Average Luminance

Angle	End	45°	Cross
45	6615	5584	6615
55	1823	1492	1823
65	935	741	935
75	408	311	408
85	66	48	66

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

Ceiling (pcc)		80%			70%			50%	
Wall (pw)		70	50	30	70	50	30	50	30
RCR		Zonal cavity method - Effective floor reflectance = 20%							
Room Cavity Ratio	0	119	119	119	116	116	116	111	111
	1	113	110	107	110	107	105	103	101
	2	106	101	96	104	99	95	96	92
	3	100	93	87	98	91	86	88	84
	4	94	85	79	92	84	78	82	77
	5	88	79	72	87	78	72	76	71
	6	83	73	67	82	73	66	71	65
	7	79	68	62	77	68	61	66	60
	8	74	64	57	73	63	57	62	56
	9	70	60	53	69	59	53	58	52
	10	67	56	49	65	55	49	55	49

Photometric Test List

Catalog No.	Test No.	Delivered Lumens	Input Watts*	Efficacy**
RBX20L835-UNV-WT-ARR16S	36336	20366	158	129
RBX20L835-UNV-WT-ARR16SL	36333	20130	158	128
RBX20L835-UNV-WT-ARR22S	36340	20383	158	129
RBX20L835-UNV-WT-ARR22SL	36337	20284	158	128
RBX20L835-UNV-WT-ARR22	36342	19381	159	122
RBX20L835-UNV-WT-A22R	36346	16105	158	102
RBX20L840-UNV-WT-ARR16S	36186	21206	159	133
RBX20L840-UNV-WT-ARR16SL	36189	20868	159	131
RBX20L840-UNV-WT-ARR22S	36193	21146	159	133
RBX20L840-UNV-WT-ARR22SL	36190	21060	159	133
RBX20L840-UNV-WT-ARR22	36194	20122	159	127
RBX20L840-UNV-WT-A22R	36199	16710	159	105
RBX15L835-UNV-WT-ARR16S	35698	17920	131	136
RBX15L835-UNV-WT-ARR16SL	35691	17704	131	135
RBX15L835-UNV-WT-ARR22S	35683	17928	131	136
RBX15L835-UNV-WT-ARR22SL	35690	17799	131	136
RBX15L835-UNV-WT-ARR22	35682	16980	131	129
RBX15L835-UNV-WT-A22R	35674	14132	131	108

Catalog No.	Test No.	Delivered Lumens	Input Watts*	Efficacy**
RBX15L840-UNV-WT-ARR16S	35627	17996	132	137
RBX15L840-UNV-WT-ARR16SL	35634	17708	132	135
RBX15L840-UNV-WT-ARR22S	35642	17942	132	136
RBX15L840-UNV-WT-ARR22SL	35635	17849	132	136
RBX15L840-UNV-WT-ARR22	35643	17066	132	130
RBX15L840-UNV-WT-A22R	35651	14247	132	108
RBX10L835-UNV-WT-ARR16S	36396	11128	86	129
RBX10L835-UNV-WT-ARR16SL	36399	10968	86	127
RBX10L835-UNV-WT-ARR22S	36403	11117	86	129
RBX10L835-UNV-WT-ARR22SL	36400	11016	86	128
RBX10L835-UNV-WT-ARR22	36404	10531	86	122
RBX10L835-UNV-WT-A22R	36407	8791	86	102
RBX10L840-UNV-WT-ARR16S	36830	11594	87	134
RBX10L840-UNV-WT-ARR16SL	36836	11611	87	134
RBX10L840-UNV-WT-ARR22S	36841	11596	87	134
RBX10L840-UNV-WT-ARR22SL	36842	11408	87	132
RBX10L840-UNV-WT-ARR22	36846	10860	87	125
RBX10L840-UNV-WT-A22R	36850	8921	87	103

* Add 7% for 347V models

** UNV models

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