

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P824181

Luminaire Tested: CB2-D-030U-085D-830-1D-UNV-STD-W-4

Issue Date: 4/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P824181
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2312-242-13, G2-2312-242-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: CB2-D-030U-085D-830-1D-UNV-STD-W-4
Description: CORELITE Bryx SLOT LED LUMINAIRE, UPLIGHT DIFFUSER DUST COVER
2-INCH APERTURE
DOWNLIGHT 850 LUMENS PER FOOT
UPLIGHT 300 LUMENS PER FOOT
Light Source: 80 CRI, 3000K CCT LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4147.7 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Semi-Direct

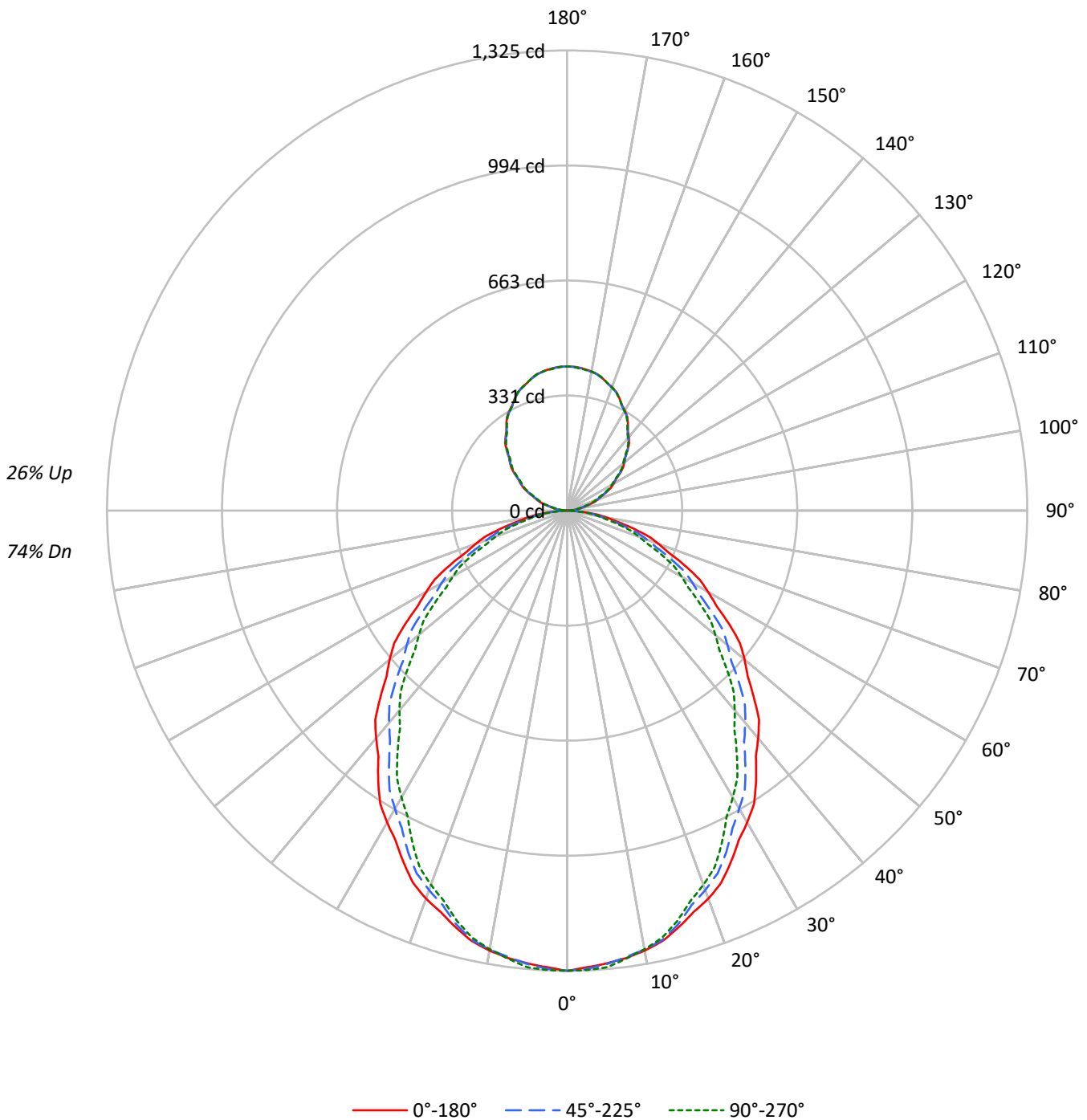
Input Watts (W): 37.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
RC	80									70									50									30									10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0														
RCR																																						
0	113	113	113	113	107	107	107	107	97	97	97	87	87	87	79	79	79	79	79	79	79	79	79	74														
1	104	99	95	92	98	94	91	88	86	83	80	77	75	73	70	68	67	67	67	67	67	67	67	63														
2	95	87	81	75	90	83	77	73	75	71	67	68	65	62	62	59	57	57	57	57	57	57	57	53														
3	86	77	69	63	82	73	66	61	67	61	57	61	56	53	55	52	49	49	49	49	49	49	49	46														
4	79	68	60	54	75	65	58	52	60	54	49	54	49	45	49	46	42	42	42	42	42	42	42	39														
5	73	61	53	47	69	58	51	45	54	47	42	49	44	40	45	40	37	37	37	37	37	37	37	34														
6	68	55	47	41	64	53	45	40	49	42	37	44	39	35	41	36	33	33	33	33	33	33	33	30														
7	63	50	42	36	59	48	40	35	44	38	33	41	35	31	37	33	29	29	29	29	29	29	29	27														
8	58	46	38	32	55	44	36	31	40	34	30	37	32	28	34	30	26	26	26	26	26	26	26	24														
9	54	42	34	29	52	40	33	28	37	31	27	34	29	25	32	27	24	24	24	24	24	24	24	22														
10	51	39	31	26	49	37	30	26	35	28	24	32	27	23	30	25	22	22	22	22	22	22	22	20														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23080	23080	23080
5°	22883	22920	23079
10°	22753	22700	22682
15°	22394	22248	22064
20°	22040	21551	21251
25°	21449	20844	20260
30°	20854	19937	19181
35°	20172	19007	18101
40°	19447	18133	17071
45°	18718	17220	16070
50°	18063	16331	15093
55°	17254	15405	14172
60°	16327	14526	13255
65°	15348	13547	12335
70°	14259	12451	11163
75°	12975	11265	10108
80°	11605	9870	9158
85°	8913	8114	6695

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 18718 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.6	3.0
10°-20°	347.4	8.4
20°-30°	499.4	12.0
30°-40°	561.4	13.5
40°-50°	542.3	13.1
50°-60°	458.2	11.0
60°-70°	329.1	7.9
70°-80°	179.9	4.3
80°-90°	47.8	1.2
90°-100°	16.0	0.4
100°-110°	66.1	1.6
110°-120°	120.0	2.9
120°-130°	163.2	3.9
130°-140°	188.4	4.5
140°-150°	189.9	4.6
150°-160°	163.9	4.0
160°-170°	111.1	2.7
170°-180°	39.2	0.9
0°-30°	971.4	23.4
0°-40°	1532.8	37.0
0°-60°	2533.2	61.1
0°-90°	3090.0	74.5
90°-120°	202.1	4.9
90°-150°	743.6	17.9
90°-180°	1058.0	25.5
0°-180°	4147.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1325	1325	1325	1325	1325	
5°	1309	1327	1311	1311	1320	124
15°	1242	1253	1234	1222	1224	350
25°	1116	1117	1085	1060	1054	514
35°	949	938	894	859	851	593
45°	760	744	699	662	652	587
55°	568	547	507	476	467	508
65°	372	358	329	305	299	369
75°	193	181	167	154	150	206
85°	45	42	41	36	34	53
90°	0	0	0	0	0	2
95°	16	14	13	10	10	18
105°	65	64	63	59	59	69
115°	124	124	122	118	118	123
125°	185	187	183	179	179	165
135°	246	249	245	240	242	190
145°	305	309	304	300	302	191
155°	357	360	355	353	356	164
165°	394	398	393	391	395	111
175°	413	418	412	410	410	39
180°	415	415	415	415	415	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1325.1	1325.1	1325.1	1325.1	1325.1
2.5°	1316.1	1332.0	1320.2	1321.9	1324.3
5°	1308.8	1326.7	1310.9	1311.1	1320.0
7.5°	1299.5	1316.4	1296.5	1292.8	1301.1
10°	1286.5	1303.4	1283.5	1276.5	1282.5
12.5°	1269.5	1285.5	1266.4	1255.4	1260.5
15°	1241.9	1252.8	1233.8	1221.6	1223.6
17.5°	1211.8	1218.6	1191.1	1181.0	1179.0
20°	1189.1	1195.1	1162.7	1148.5	1146.5
22.5°	1159.9	1165.1	1131.1	1113.6	1110.8
25°	1116.1	1117.1	1084.6	1060.1	1054.2
27.5°	1070.2	1067.0	1031.0	1002.1	994.3
30°	1036.9	1033.0	991.3	960.7	953.7
32.5°	1001.2	994.1	952.3	919.3	912.3
35°	948.7	937.7	893.9	859.2	851.3
37.5°	892.7	880.3	837.3	799.5	790.6
40°	855.3	841.4	797.5	759.7	750.8
42.5°	818.0	802.5	757.7	719.9	710.2
45°	759.9	744.1	699.1	662.3	652.4
47.5°	704.7	684.5	640.8	604.3	594.4
50°	666.6	644.8	602.7	566.9	557.0
52.5°	627.6	605.0	564.5	530.4	520.5
55°	568.2	547.3	507.3	475.6	466.7
57.5°	509.3	489.3	452.7	422.5	413.8
60°	468.7	451.9	417.0	388.4	380.5
62.5°	429.8	414.5	381.3	355.1	347.2
65°	372.4	358.5	328.7	305.3	299.3
67.5°	316.6	302.7	278.6	257.6	250.8
70°	280.0	266.1	244.5	225.1	219.2
72.5°	245.1	230.4	212.9	195.1	190.7
75°	192.8	180.9	167.4	154.1	150.2
77.5°	146.5	135.0	125.2	115.8	114.9
80°	115.7	105.7	98.4	92.3	91.3
82.5°	86.4	78.9	74.1	69.6	69.4
85°	44.6	41.7	40.6	35.5	33.5
87.5°	13.0	13.0	11.4	9.7	9.8
90°	0.0	0.0	0.3	0.0	0.3
92.5°	3.9	3.4	3.2	2.1	2.4
95°	15.5	13.6	12.9	10.0	10.0
97.5°	29.3	27.4	26.4	23.4	22.8
100°	39.1	37.2	36.2	33.0	32.4
102.5°	49.2	48.4	46.6	43.1	42.4
105°	65.3	64.4	62.8	59.2	58.6
107.5°	81.9	82.1	79.6	76.7	75.8
110°	93.8	93.5	91.6	88.6	88.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	106.0	105.4	103.5	100.5	99.9
115°	124.2	123.9	121.6	118.1	117.8
117.5°	141.6	142.6	139.9	136.1	136.0
120°	154.0	155.3	152.1	148.8	148.2
122.5°	166.2	167.7	164.5	160.7	160.9
125°	184.7	186.6	182.8	178.9	179.2
127.5°	202.6	205.0	201.4	197.5	197.9
130°	214.8	217.7	213.8	209.7	210.3
132.5°	227.2	230.1	226.3	221.8	223.0
135°	246.2	249.0	244.9	240.4	242.0
137.5°	264.1	266.9	262.4	258.6	260.5
140°	276.0	278.8	274.0	270.5	272.4
142.5°	287.6	291.0	285.9	282.2	284.6
145°	305.1	308.6	303.8	300.3	302.5
147.5°	321.6	325.1	320.3	316.9	319.2
150°	332.2	335.7	330.6	327.8	330.3
152.5°	342.1	346.1	340.7	337.9	341.2
155°	356.8	360.3	355.2	353.0	355.9
157.5°	369.6	373.7	368.6	366.7	369.0
160°	378.2	382.0	376.9	375.0	377.5
162.5°	384.7	388.7	383.9	381.7	384.8
165°	394.4	398.5	393.4	391.2	394.7
167.5°	402.0	406.4	401.2	399.0	402.5
170°	406.7	410.8	405.4	402.9	406.7
172.5°	409.8	414.1	408.5	405.9	408.5
175°	413.1	417.6	412.2	409.6	410.5
177.5°	414.7	418.3	414.0	411.7	414.7
180°	414.7	414.7	414.7	414.7	414.7



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	19.92	21.04	20.64	21.77	22.65	18.83	19.94	19.54	20.68	21.55
	3H	21.59	22.59	22.32	23.33	24.24	20.37	21.37	21.10	22.12	23.02
	4H	22.23	23.17	22.98	23.93	24.84	20.96	21.90	21.70	22.65	23.57
	6H	22.64	23.51	23.40	24.28	25.21	21.34	22.21	22.10	22.98	23.91
	8H	22.80	23.63	23.57	24.41	25.35	21.49	22.32	22.26	23.10	24.03
	12H	22.88	23.67	23.66	24.45	25.41	21.56	22.35	22.34	23.13	24.09
4H	2H	20.36	21.31	21.12	22.06	22.98	19.49	20.43	20.24	21.19	22.11
	3H	22.26	23.04	23.02	23.83	24.77	21.25	22.03	22.01	22.82	23.76
	4H	23.01	23.73	23.79	24.52	25.48	21.93	22.65	22.71	23.44	24.40
	6H	23.54	24.16	24.34	24.98	25.95	22.42	23.04	23.22	23.85	24.82
	8H	23.76	24.33	24.56	25.14	26.13	22.61	23.19	23.42	24.00	24.99
	12H	23.87	24.39	24.69	25.23	26.21	22.71	23.23	23.54	24.07	25.06
8H	4H	23.19	23.77	23.99	24.58	25.56	22.22	22.80	23.02	23.61	24.60
	6H	23.84	24.32	24.67	25.17	26.15	22.84	23.32	23.67	24.17	25.15
	8H	24.13	24.56	24.97	25.41	26.41	23.11	23.54	23.96	24.39	25.39
	12H	24.32	24.69	25.16	25.53	26.59	23.28	23.65	24.12	24.49	25.55
12H	4H	23.18	23.70	24.00	24.53	25.52	22.24	22.76	23.06	23.59	24.58
	6H	23.87	24.30	24.71	25.15	26.15	22.90	23.33	23.74	24.18	25.18
	8H	24.20	24.57	25.04	25.41	26.47	23.22	23.60	24.06	24.44	25.49