

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: P824211

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

Issue Date: 4/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P824211  
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-085U-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 850 LUMENS PER FOOT  
Light Source: 80 CRI, 3000K CCT LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6171.2 lumens  
Efficiency: N/A  
Efficacy: 115.8 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: General Diffuse

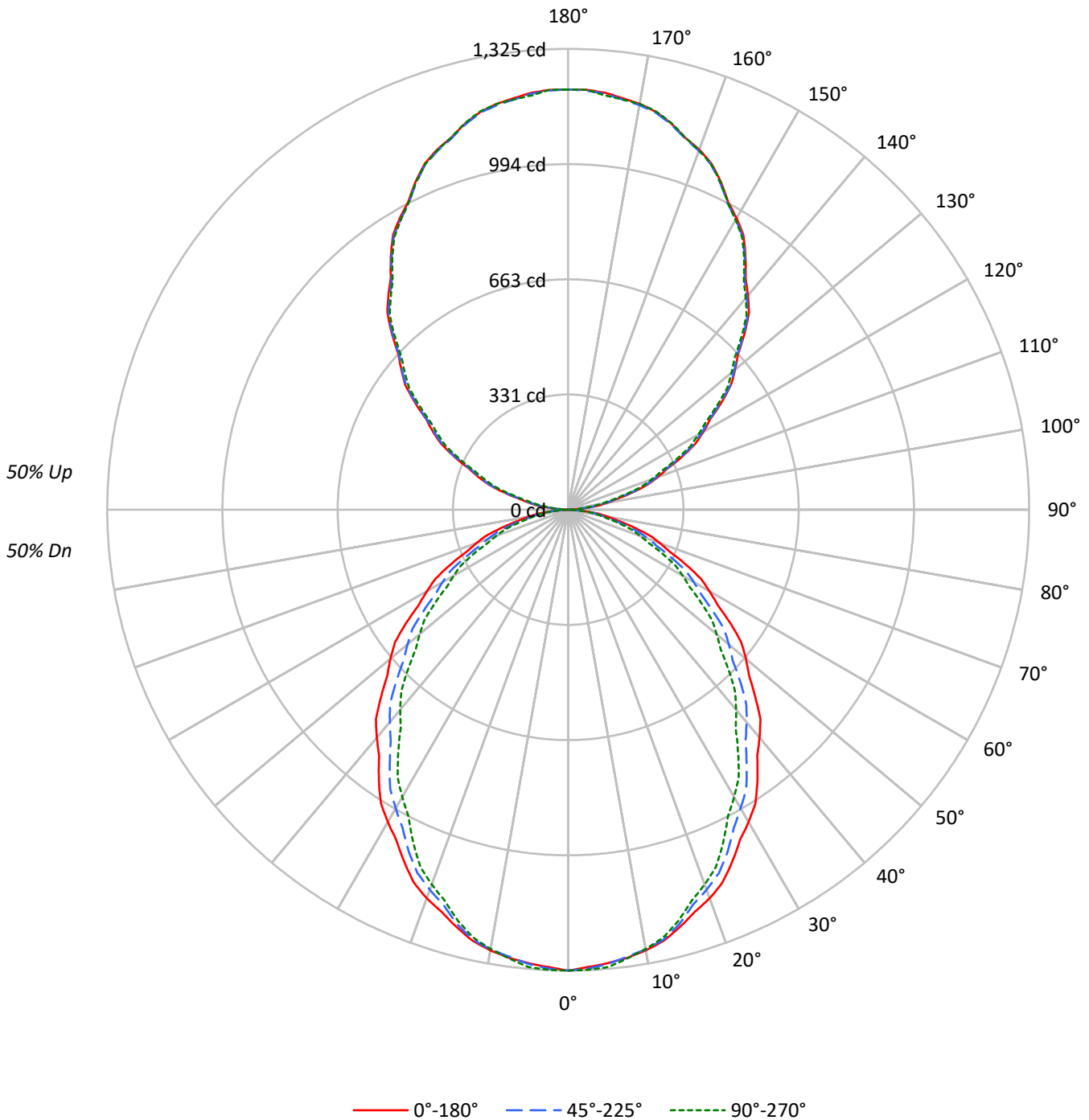
Input Watts (W): 53.3  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					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	0	
RCR																						
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50				
1	98	94	90	86	90	87	83	80	73	71	69	61	60	58	50	49	48	43				
2	89	82	76	71	82	76	71	66	64	61	57	54	51	49	44	42	41	36				
3	82	72	65	59	75	67	61	56	57	52	48	48	44	41	39	37	35	31				
4	75	64	56	50	69	59	53	47	51	46	41	43	39	36	35	32	30	26				
5	69	57	49	43	63	53	46	41	46	40	36	38	34	31	32	29	26	23				
6	63	51	43	38	58	48	41	35	41	36	31	35	31	27	29	26	23	20				
7	59	46	39	33	54	43	36	31	37	32	28	32	27	24	27	23	21	18				
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	19	16				
9	51	39	31	26	47	36	29	25	31	26	22	27	23	20	23	19	17	15				
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	21	18	15	13				

**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	2.0
10°-20°	347.4	5.6
20°-30°	499.4	8.1
30°-40°	561.4	9.1
40°-50°	542.3	8.8
50°-60°	458.2	7.4
60°-70°	329.1	5.3
70°-80°	179.9	2.9
80°-90°	47.8	0.8
90°-100°	46.7	0.8
100°-110°	192.5	3.1
110°-120°	349.4	5.7
120°-130°	475.5	7.7
130°-140°	548.9	8.9
140°-150°	553.2	9.0
150°-160°	477.4	7.7
160°-170°	323.5	5.2
170°-180°	114.1	1.8
0°-30°	971.4	15.7
0°-40°	1532.8	24.8
0°-60°	2533.2	41.0
0°-90°	3090.0	50.1
90°-120°	588.6	9.5
90°-150°	2166.2	35.1
90°-180°	3081.0	49.9
0°-180°	6171.2	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	1	0	1	3
95°	45	40	38	29	29	53
105°	190	188	183	172	171	202
115°	362	361	354	344	343	357
125°	538	544	532	521	522	480
135°	717	726	713	700	705	552
145°	889	899	885	875	881	555
155°	1040	1050	1035	1028	1037	478
165°	1149	1161	1146	1140	1150	324
175°	1203	1216	1201	1193	1196	114
180°	1208	1208	1208	1208	1208	



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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	11.6	9.7	9.9
90°	0.0	0.0	0.9	0.0	0.9
92.5°	11.3	9.8	9.2	6.1	7.0
95°	45.2	39.7	37.7	29.2	29.2
97.5°	85.4	79.9	76.9	68.2	66.3
100°	114.0	108.5	105.5	96.1	94.2
102.5°	143.4	140.9	135.7	125.5	123.6
105°	190.4	187.6	182.8	172.4	170.6
107.5°	238.6	239.2	232.0	223.5	220.9
110°	273.3	272.4	266.7	258.2	256.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	308.7	307.1	301.4	292.9	291.0
115°	361.9	361.0	354.3	344.0	343.0
117.5°	412.4	415.3	407.5	396.6	396.2
120°	448.6	452.3	442.9	433.5	431.6
122.5°	484.0	488.4	479.1	468.2	468.6
125°	538.1	543.6	532.5	521.2	522.1
127.5°	590.3	597.1	586.7	575.3	576.4
130°	625.8	634.0	622.9	610.7	612.6
132.5°	661.9	670.2	659.1	646.2	649.5
135°	717.2	725.5	713.4	700.3	704.9
137.5°	769.2	777.5	764.3	753.3	758.8
140°	803.9	812.2	798.2	788.0	793.5
142.5°	837.8	847.6	832.9	821.9	828.9
145°	888.7	898.8	884.9	874.7	881.1
147.5°	936.9	947.1	933.0	923.1	929.8
150°	967.8	978.0	963.1	954.8	962.2
152.5°	996.5	1008.1	992.5	984.3	993.9
155°	1039.5	1049.6	1034.8	1028.3	1036.6
157.5°	1076.8	1088.6	1073.8	1068.3	1074.9
160°	1101.7	1112.7	1097.9	1092.4	1099.8
162.5°	1120.5	1132.3	1118.3	1112.0	1120.9
165°	1148.8	1160.8	1146.0	1139.6	1149.7
167.5°	1171.0	1183.7	1168.8	1162.2	1172.5
170°	1184.6	1196.6	1180.8	1173.5	1184.6
172.5°	1193.6	1206.4	1189.9	1182.5	1189.9
175°	1203.4	1216.3	1200.6	1193.1	1195.9
177.5°	1208.2	1218.5	1205.9	1199.3	1208.2
180°	1208.2	1208.2	1208.2	1208.2	1208.2



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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	17.91	18.76	18.87	19.74	21.01	16.81	17.66	17.77	18.64	19.91
	3H	19.56	20.32	20.53	21.30	22.59	18.34	19.10	19.31	20.08	21.38
	4H	20.19	20.91	21.17	21.89	23.19	18.91	19.63	19.90	20.62	21.92
	6H	20.59	21.25	21.58	22.24	23.56	19.28	19.95	20.28	20.94	22.25
	8H	20.74	21.37	21.74	22.37	23.69	19.42	20.06	20.43	21.06	22.38
	12H	20.81	21.41	21.81	22.41	23.75	19.49	20.09	20.49	21.09	22.42
4H	2H	18.32	19.04	19.31	20.03	21.33	17.45	18.17	18.44	19.15	20.46
	3H	20.19	20.79	21.19	21.81	23.12	19.18	19.78	20.18	20.80	22.11
	4H	20.94	21.48	21.94	22.49	23.83	19.85	20.40	20.86	21.41	22.75
	6H	21.45	21.93	22.47	22.96	24.29	20.33	20.80	21.35	21.83	23.17
	8H	21.66	22.10	22.68	23.12	24.48	20.52	20.96	21.54	21.98	23.33
	12H	21.76	22.16	22.80	23.20	24.56	20.61	21.00	21.64	22.04	23.40
8H	4H	21.09	21.53	22.11	22.56	23.91	20.13	20.57	21.15	21.59	22.94
	6H	21.73	22.10	22.78	23.16	24.51	20.73	21.10	21.77	22.16	23.51
	8H	22.02	22.34	23.07	23.39	24.76	21.01	21.33	22.06	22.38	23.75
	12H	22.20	22.48	23.25	23.52	24.93	21.15	21.44	22.21	22.48	23.89
12H	4H	21.07	21.47	22.11	22.51	23.86	20.13	20.53	21.17	21.57	22.92
	6H	21.76	22.08	22.81	23.13	24.50	20.79	21.11	21.84	22.17	23.53
	8H	22.08	22.36	23.13	23.41	24.82	21.10	21.38	22.15	22.43	23.84