

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



Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P384318

Luminaire Tested: **22ID-70-L830-CFD2**

Issue Date: 2/25/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P384318  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1911-572-68)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 2/25/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: 22ID-70-L830-CFD2  
Description: 2X2 IN DEPTH TROFFER WITH 2INCH DROP CUBE LENS

Light Source: -  
Ballast/Driver: -

**Summary**

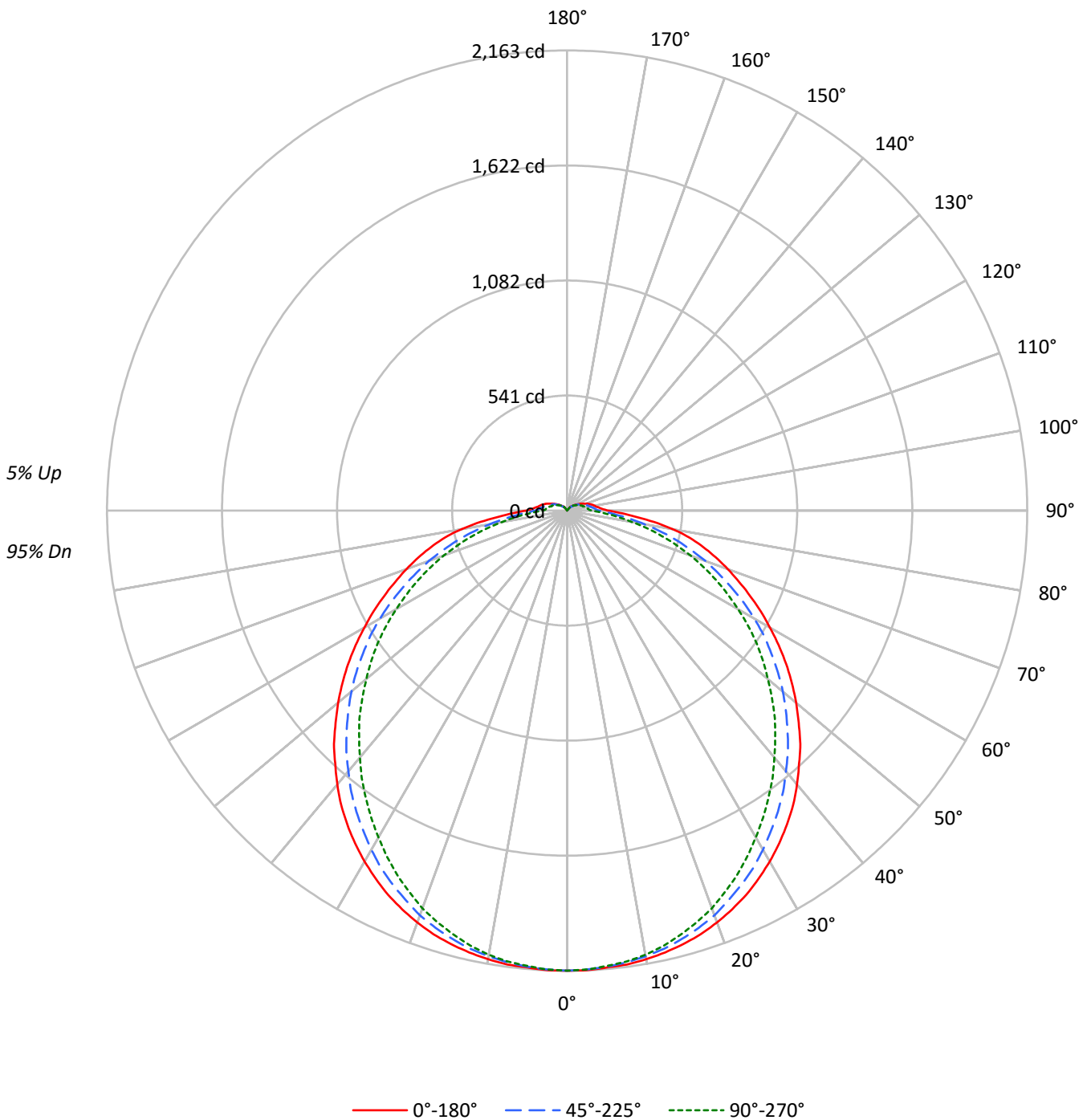
Lumens per Lamp: N/A  
Luminaire Lumens: 7014.5 lumens  
Efficiency: N/A  
Efficacy: 114.8 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.22 / 1.38  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 2' x H: 0.17')  
CIE Type: Direct

Input Watts (W): 61.1  
Input Voltage (V): NR  
Input Current (Ain): 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: 25 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	0
RCR																		
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	97	97	97	95
1	106	101	96	92	103	98	94	90	93	90	86	88	85	83	84	81	79	77
2	96	87	80	74	93	85	78	73	81	75	70	77	72	68	73	69	66	63
3	87	76	68	61	84	74	67	60	71	64	58	67	62	57	64	59	55	53
4	80	68	58	51	77	66	57	51	63	55	50	60	53	48	57	51	47	45
5	73	60	51	44	71	59	50	44	56	48	43	53	47	42	51	45	41	38
6	68	54	45	38	65	53	44	38	50	43	37	48	42	36	46	40	36	33
7	63	49	40	34	61	48	39	33	46	38	33	44	37	32	42	36	32	30
8	58	45	36	30	56	44	35	30	42	35	29	40	34	29	39	33	28	26
9	54	41	33	27	53	40	32	27	39	31	26	37	31	26	36	30	25	24
10	51	38	30	24	50	37	29	24	36	29	24	34	28	23	33	27	23	21

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5820	5820	5820
5°	5781	5754	5762
10°	5767	5694	5710
15°	5749	5630	5623
20°	5726	5560	5529
25°	5696	5459	5402
30°	5646	5355	5257
35°	5592	5242	5120
40°	5520	5114	4974
45°	5446	4989	4849
50°	5351	4859	4691
55°	5268	4705	4556
60°	5177	4541	4362
65°	5124	4318	4168
70°	5144	4102	3943
75°	5249	3808	3649
80°	5327	3419	3278
85°	5038	3073	3022



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	204.7	2.9
10°-20°	588.6	8.4
20°-30°	894.0	12.7
30°-40°	1079.8	15.4
40°-50°	1130.2	16.1
50°-60°	1048.7	15.0
60°-70°	849.5	12.1
70°-80°	573.2	8.2
80°-90°	277.0	3.9
90°-100°	139.3	2.0
100°-110°	101.3	1.4
110°-120°	67.7	1.0
120°-130°	39.2	0.6
130°-140°	19.8	0.3
140°-150°	1.5	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1687.3	24.1
0°-40°	2767.1	39.4
0°-60°	4946.0	70.5
0°-90°	6645.7	94.7
90°-120°	308.3	4.4
90°-150°	368.8	5.3
90°-180°	369.0	5.3
0°-180°	7014.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2163	2163	2163	2163	2163	
5°	2156	2152	2152	2148	2148	205
15°	2110	2099	2085	2071	2064	596
25°	1993	1975	1940	1904	1890	918
35°	1802	1777	1727	1674	1650	1127
45°	1550	1522	1465	1405	1380	1194
55°	1257	1228	1172	1115	1087	1123
65°	949	913	850	804	772	941
75°	662	595	527	488	460	697
85°	319	276	234	212	191	301
90°	191	173	149	134	113	109
95°	152	142	127	113	99	120
105°	113	106	96	85	78	121
115°	78	71	71	60	60	78
125°	50	42	46	39	42	43
135°	28	25	25	25	28	22
145°	0	0	0	0	0	2
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2162.7	2162.7	2162.7	2162.7	2162.7
2.5°	2162.7	2159.2	2159.2	2159.2	2159.2
5°	2155.6	2152.1	2152.1	2148.5	2148.5
7.5°	2152.1	2145.0	2141.5	2137.9	2137.9
10°	2141.5	2134.4	2127.3	2120.2	2120.2
12.5°	2127.3	2120.2	2109.6	2095.4	2095.4
15°	2109.6	2099.0	2084.8	2070.7	2063.6
17.5°	2088.4	2077.8	2056.5	2035.3	2028.2
20°	2060.1	2045.9	2024.7	1996.3	1989.3
22.5°	2028.2	2014.0	1982.2	1953.9	1939.7
25°	1992.8	1975.1	1939.7	1904.3	1890.2
27.5°	1950.3	1932.6	1893.7	1851.2	1833.5
30°	1904.3	1883.1	1840.6	1794.6	1773.3
32.5°	1854.8	1830.0	1784.0	1734.4	1713.2
35°	1801.7	1776.9	1727.3	1674.2	1649.5
37.5°	1745.0	1720.3	1667.2	1610.5	1585.7
40°	1681.3	1656.5	1599.9	1543.3	1515.0
42.5°	1614.1	1592.8	1536.2	1476.0	1447.7
45°	1550.3	1522.0	1465.4	1405.2	1380.4
47.5°	1476.0	1454.8	1394.6	1334.4	1306.1
50°	1405.2	1380.4	1323.8	1263.6	1231.8
52.5°	1330.9	1309.7	1249.5	1189.3	1161.0
55°	1256.6	1228.2	1171.6	1115.0	1086.7
57.5°	1178.7	1153.9	1097.3	1044.2	1008.8
60°	1100.8	1076.0	1015.9	966.3	927.4
62.5°	1026.5	998.2	934.5	881.4	849.5
65°	948.6	913.2	849.5	803.5	771.6
67.5°	874.3	831.8	768.1	725.6	693.8
70°	803.5	753.9	690.2	647.7	615.9
72.5°	732.7	672.5	605.3	566.3	538.0
75°	661.9	594.7	527.4	488.5	460.1
77.5°	591.1	513.2	446.0	414.1	385.8
80°	506.2	431.8	368.1	339.8	311.5
82.5°	410.6	350.4	297.3	269.0	247.8
85°	318.6	276.1	233.6	212.4	191.1
87.5°	247.8	215.9	184.1	166.4	148.7
90°	191.1	173.4	148.7	134.5	113.3
92.5°	166.4	152.2	134.5	120.3	102.6
95°	152.2	141.6	127.4	113.3	99.1
97.5°	138.0	131.0	116.8	106.2	92.0
100°	131.0	120.3	109.7	99.1	88.5
102.5°	123.9	113.3	102.6	92.0	85.0
105°	113.3	106.2	95.6	85.0	77.9
107.5°	106.2	95.6	88.5	77.9	74.3
110°	95.6	88.5	81.4	74.3	70.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	85.0	81.4	74.3	67.3	63.7
115°	77.9	70.8	70.8	60.2	60.2
117.5°	70.8	63.7	63.7	56.6	56.6
120°	60.2	56.6	56.6	49.6	49.6
122.5°	53.1	49.6	49.6	46.0	46.0
125°	49.6	42.5	46.0	38.9	42.5
127.5°	42.5	38.9	38.9	35.4	38.9
130°	35.4	31.9	31.9	31.9	35.4
132.5°	31.9	28.3	28.3	28.3	31.9
135°	28.3	24.8	24.8	24.8	28.3
137.5°	24.8	21.2	17.7	21.2	24.8
140°	21.2	17.7	14.2	17.7	21.2
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0



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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	17.51	19.07	17.96	19.50	19.94	16.74	18.30	17.19	18.73	19.17
	3H	19.62	21.04	20.08	21.47	21.96	18.59	20.01	19.05	20.44	20.93
	4H	20.57	21.91	21.05	22.36	22.86	19.31	20.65	19.79	21.11	21.61
	6H	21.43	22.68	21.93	23.15	23.66	19.89	21.13	20.38	21.60	22.12
	8H	21.79	22.98	22.29	23.47	23.99	20.10	21.29	20.60	21.78	22.31
	12H	22.08	23.23	22.59	23.71	24.26	20.28	21.42	20.79	21.91	22.46
4H	2H	18.06	19.40	18.54	19.85	20.35	17.46	18.80	17.94	19.25	19.75
	3H	20.39	21.53	20.89	22.03	22.55	19.53	20.66	20.02	21.16	21.68
	4H	21.48	22.52	21.99	23.02	23.58	20.38	21.42	20.89	21.93	22.48
	6H	22.50	23.41	23.03	23.94	24.51	21.09	22.00	21.62	22.54	23.11
	8H	22.92	23.78	23.46	24.31	24.90	21.36	22.22	21.90	22.75	23.34
	12H	23.30	24.07	23.86	24.64	25.23	21.60	22.38	22.16	22.94	23.53
8H	4H	21.76	22.62	22.30	23.15	23.73	20.80	21.65	21.33	22.19	22.77
	6H	22.91	23.63	23.48	24.21	24.80	21.65	22.37	22.22	22.95	23.54
	8H	23.44	24.09	24.02	24.68	25.28	22.02	22.67	22.60	23.26	23.86
	12H	23.94	24.52	24.52	25.09	25.77	22.36	22.93	22.94	23.51	24.18
12H	4H	21.79	22.56	22.35	23.13	23.72	20.87	21.65	21.43	22.21	22.80
	6H	22.97	23.62	23.55	24.21	24.81	21.77	22.42	22.35	23.01	23.61
	8H	23.55	24.13	24.14	24.71	25.38	22.20	22.78	22.78	23.36	24.03