

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: P384389

Luminaire Tested: **24ID-90-L850-CFD2**

Issue Date: 2/25/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P384389  
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: 24ID-90-L850-CFD2  
Description: 2X4 IN DEPTH TROFFER WITH 2INCH DROP CUBE LENS

Light Source: -  
Ballast/Driver: -

**Summary**

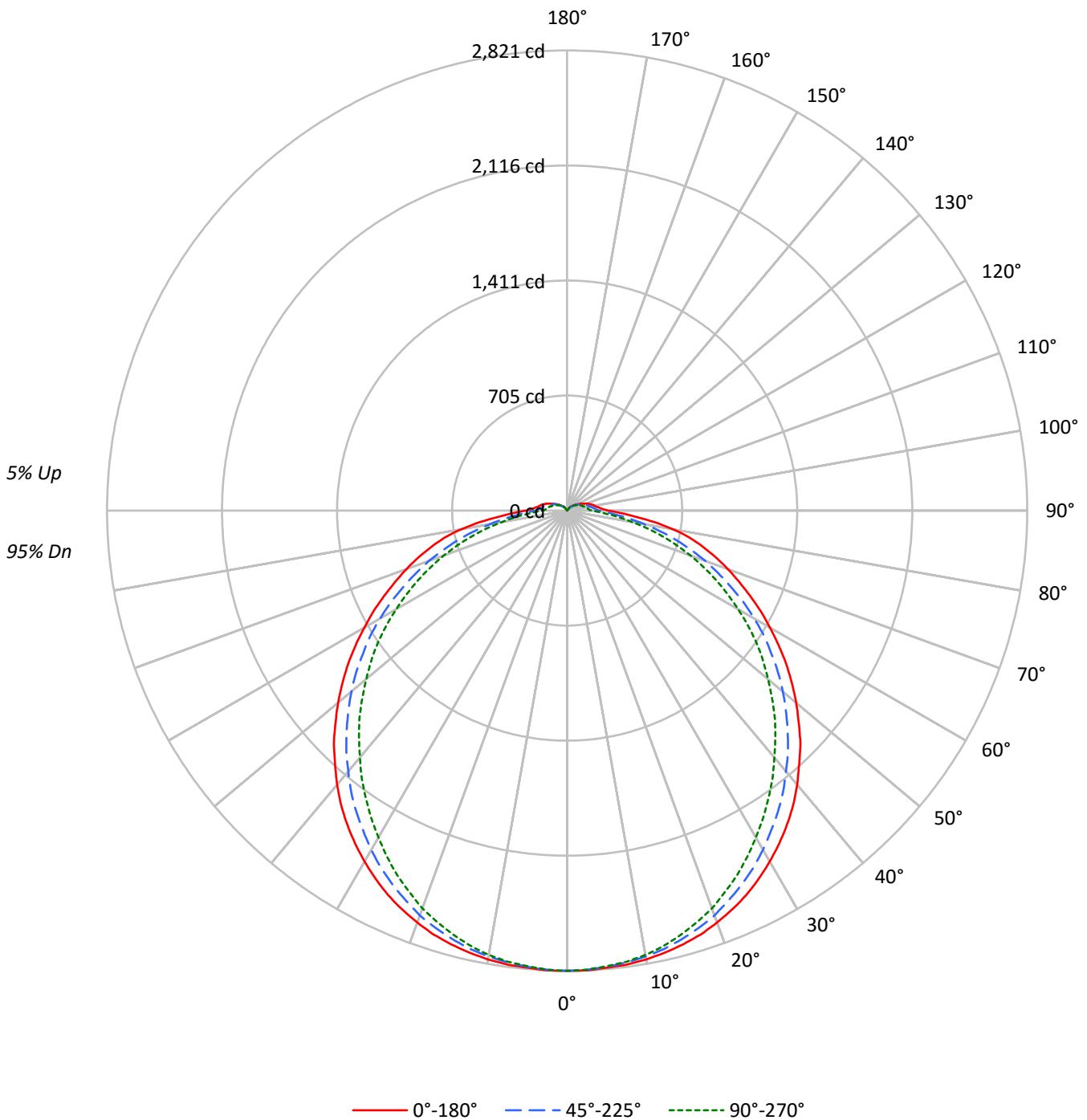
Lumens per Lamp: N/A  
Luminaire Lumens: 9150.8 lumens  
Efficiency: N/A  
Efficacy: 104.6 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.22 / 1.38  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')  
CIE Type: Direct

Input Watts (W): 87.5  
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°	3796	3796	3796
5°	3784	3763	3758
10°	3789	3733	3724
15°	3791	3701	3668
20°	3791	3664	3606
25°	3786	3608	3524
30°	3769	3549	3429
35°	3751	3486	3340
40°	3722	3413	3244
45°	3694	3342	3163
50°	3656	3270	3060
55°	3629	3183	2972
60°	3604	3093	2845
65°	3617	2966	2719
70°	3700	2850	2572
75°	3885	2689	2380
80°	4138	2478	2138
85°	4346	2341	1972



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	267.0	2.9
10°-20°	767.8	8.4
20°-30°	1166.3	12.7
30°-40°	1408.7	15.4
40°-50°	1474.4	16.1
50°-60°	1368.1	15.0
60°-70°	1108.2	12.1
70°-80°	747.8	8.2
80°-90°	361.3	3.9
90°-100°	181.8	2.0
100°-110°	132.1	1.4
110°-120°	88.3	1.0
120°-130°	51.2	0.6
130°-140°	25.8	0.3
140°-150°	2.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2201.1	24.1
0°-40°	3609.8	39.4
0°-60°	6452.4	70.5
0°-90°	8669.6	94.7
90°-120°	402.2	4.4
90°-150°	481.1	5.3
90°-180°	481.0	5.3
0°-180°	9150.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2821	2821	2821	2821	2821	
5°	2812	2808	2808	2803	2803	268
15°	2752	2738	2720	2701	2692	777
25°	2600	2577	2530	2484	2466	1198
35°	2350	2318	2253	2184	2152	1470
45°	2022	1986	1912	1833	1801	1558
55°	1639	1602	1528	1454	1418	1465
65°	1238	1191	1108	1048	1007	1228
75°	864	776	688	637	600	910
85°	416	360	305	277	249	393
90°	249	226	194	176	148	142
95°	199	185	166	148	129	156
105°	148	138	125	111	102	158
115°	102	92	92	78	78	101
125°	65	55	60	51	55	57
135°	37	32	32	32	37	29
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°	2821.4	2821.4	2821.4	2821.4	2821.4
2.5°	2821.4	2816.7	2816.7	2816.7	2816.7
5°	2812.1	2807.5	2807.5	2802.9	2802.9
7.5°	2807.5	2798.3	2793.7	2789.0	2789.0
10°	2793.7	2784.4	2775.2	2766.0	2766.0
12.5°	2775.2	2766.0	2752.1	2733.6	2733.6
15°	2752.1	2738.2	2719.8	2701.3	2692.1
17.5°	2724.4	2710.5	2682.8	2655.1	2645.9
20°	2687.5	2669.0	2641.3	2604.3	2595.1
22.5°	2645.9	2627.4	2585.9	2548.9	2530.5
25°	2599.7	2576.6	2530.5	2484.3	2465.8
27.5°	2544.3	2521.2	2470.4	2415.0	2391.9
30°	2484.3	2456.6	2401.2	2341.1	2313.4
32.5°	2419.6	2387.3	2327.3	2262.6	2234.9
35°	2350.4	2318.0	2253.4	2184.1	2151.8
37.5°	2276.5	2244.2	2174.9	2101.0	2068.7
40°	2193.4	2161.0	2087.2	2013.3	1976.3
42.5°	2105.6	2077.9	2004.0	1925.5	1888.6
45°	2022.5	1985.6	1911.7	1833.2	1800.9
47.5°	1925.5	1897.8	1819.3	1740.8	1703.9
50°	1833.2	1800.9	1727.0	1648.5	1606.9
52.5°	1736.2	1708.5	1630.0	1551.5	1514.6
55°	1639.3	1602.3	1528.4	1454.5	1417.6
57.5°	1537.7	1505.3	1431.5	1362.2	1316.0
60°	1436.1	1403.8	1325.3	1260.6	1209.8
62.5°	1339.1	1302.2	1219.1	1149.8	1108.2
65°	1237.5	1191.3	1108.2	1048.2	1006.6
67.5°	1140.6	1085.1	1002.0	946.6	905.1
70°	1048.2	983.6	900.4	845.0	803.5
72.5°	955.8	877.3	789.6	738.8	701.9
75°	863.5	775.8	688.0	637.2	600.3
77.5°	771.1	669.6	581.8	540.3	503.3
80°	660.3	563.3	480.2	443.3	406.4
82.5°	535.6	457.1	387.9	350.9	323.2
85°	415.6	360.2	304.8	277.1	249.4
87.5°	323.2	281.7	240.1	217.0	193.9
90°	249.4	226.3	193.9	175.5	147.8
92.5°	217.0	198.6	175.5	157.0	133.9
95°	198.6	184.7	166.2	147.8	129.3
97.5°	180.1	170.9	152.4	138.5	120.1
100°	170.9	157.0	143.1	129.3	115.4
102.5°	161.6	147.8	133.9	120.1	110.8
105°	147.8	138.5	124.7	110.8	101.6
107.5°	138.5	124.7	115.4	101.6	97.0
110°	124.7	115.4	106.2	97.0	92.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	110.8	106.2	97.0	87.7	83.1
115°	101.6	92.4	92.4	78.5	78.5
117.5°	92.4	83.1	83.1	73.9	73.9
120°	78.5	73.9	73.9	64.6	64.6
122.5°	69.3	64.6	64.6	60.0	60.0
125°	64.6	55.4	60.0	50.8	55.4
127.5°	55.4	50.8	50.8	46.2	50.8
130°	46.2	41.6	41.6	41.6	46.2
132.5°	41.6	36.9	36.9	36.9	41.6
135°	36.9	32.3	32.3	32.3	36.9
137.5°	32.3	27.7	23.1	27.7	32.3
140°	27.7	23.1	18.5	23.1	27.7
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

(END OF REPORT)