

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: P384388

Luminaire Tested: **24ID-90-L840-CFD2**

Issue Date: 2/25/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P384388  
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-L840-CFD2  
Description: 2X4 IN DEPTH TROFFER WITH 2INCH DROP CUBE LENS

Light Source: -  
Ballast/Driver: -

**Summary**

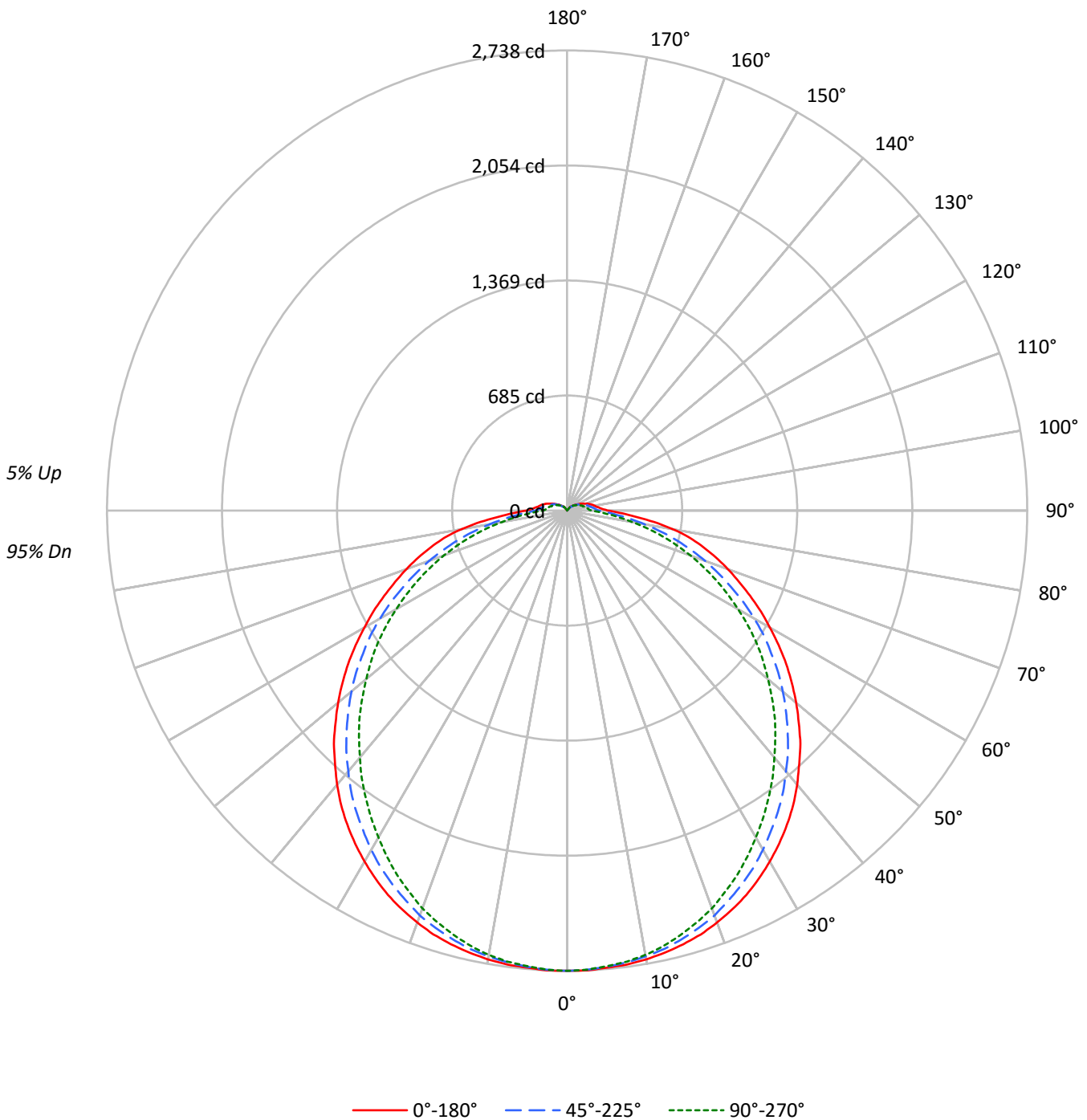
Lumens per Lamp: N/A  
Luminaire Lumens: 8881.7 lumens  
Efficiency: N/A  
Efficacy: 101.5 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.22 / 1.38  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')  
CIE Type: Direct

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°	3684	3684	3684
5°	3673	3652	3648
10°	3678	3624	3615
15°	3680	3592	3560
20°	3679	3556	3500
25°	3675	3502	3420
30°	3658	3445	3328
35°	3641	3383	3241
40°	3613	3312	3149
45°	3586	3244	3070
50°	3548	3174	2970
55°	3523	3090	2884
60°	3498	3002	2761
65°	3510	2879	2639
70°	3591	2766	2496
75°	3771	2610	2310
80°	4017	2406	2075
85°	4218	2272	1913



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	259.2	2.9
10°-20°	745.3	8.4
20°-30°	1132.0	12.7
30°-40°	1367.3	15.4
40°-50°	1431.1	16.1
50°-60°	1327.9	15.0
60°-70°	1075.6	12.1
70°-80°	725.8	8.2
80°-90°	350.7	3.9
90°-100°	176.4	2.0
100°-110°	128.2	1.4
110°-120°	85.7	1.0
120°-130°	49.7	0.6
130°-140°	25.1	0.3
140°-150°	1.9	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2136.4	24.1
0°-40°	3503.7	39.4
0°-60°	6262.6	70.5
0°-90°	8414.7	94.7
90°-120°	390.3	4.4
90°-150°	467.0	5.3
90°-180°	467.0	5.3
0°-180°	8881.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2738	2738	2738	2738	2738	
5°	2729	2725	2725	2720	2720	260
15°	2671	2658	2640	2622	2613	755
25°	2523	2501	2456	2411	2393	1163
35°	2281	2250	2187	2120	2088	1427
45°	1963	1927	1856	1779	1748	1512
55°	1591	1555	1484	1412	1376	1422
65°	1201	1156	1076	1017	977	1192
75°	838	753	668	618	583	883
85°	403	350	296	269	242	381
90°	242	220	188	170	143	138
95°	193	179	161	143	126	151
105°	143	134	121	108	99	153
115°	99	90	90	76	76	98
125°	63	54	58	49	54	55
135°	36	31	31	31	36	28
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°	2738.4	2738.4	2738.4	2738.4	2738.4
2.5°	2738.4	2733.9	2733.9	2733.9	2733.9
5°	2729.4	2724.9	2724.9	2720.5	2720.5
7.5°	2724.9	2716.0	2711.5	2707.0	2707.0
10°	2711.5	2702.5	2693.6	2684.6	2684.6
12.5°	2693.6	2684.6	2671.2	2653.2	2653.2
15°	2671.2	2657.7	2639.8	2621.9	2612.9
17.5°	2644.3	2630.8	2603.9	2577.0	2568.1
20°	2608.4	2590.5	2563.6	2527.7	2518.8
22.5°	2568.1	2550.2	2509.8	2474.0	2456.0
25°	2523.3	2500.9	2456.0	2411.2	2393.3
27.5°	2469.5	2447.1	2397.8	2344.0	2321.6
30°	2411.2	2384.3	2330.5	2272.3	2245.4
32.5°	2348.5	2317.1	2258.8	2196.1	2169.2
35°	2281.2	2249.9	2187.1	2119.9	2088.5
37.5°	2209.5	2178.2	2110.9	2039.2	2007.9
40°	2128.9	2097.5	2025.8	1954.1	1918.2
42.5°	2043.7	2016.8	1945.1	1868.9	1833.1
45°	1963.0	1927.2	1855.5	1779.3	1747.9
47.5°	1868.9	1842.0	1765.8	1689.6	1653.8
50°	1779.3	1747.9	1676.2	1600.0	1559.7
52.5°	1685.2	1658.3	1582.1	1505.9	1470.0
55°	1591.0	1555.2	1483.5	1411.8	1375.9
57.5°	1492.4	1461.1	1389.4	1322.1	1277.3
60°	1393.8	1362.5	1286.3	1223.5	1174.2
62.5°	1299.7	1263.9	1183.2	1116.0	1075.6
65°	1201.1	1156.3	1075.6	1017.4	977.0
67.5°	1107.0	1053.2	972.6	918.8	878.4
70°	1017.4	954.6	874.0	820.2	779.8
72.5°	927.7	851.5	766.4	717.1	681.2
75°	838.1	752.9	667.8	618.5	582.6
77.5°	748.5	649.9	564.7	524.4	488.5
80°	640.9	546.8	466.1	430.3	394.4
82.5°	519.9	443.7	376.5	340.6	313.7
85°	403.4	349.6	295.8	268.9	242.0
87.5°	313.7	273.4	233.1	210.6	188.2
90°	242.0	219.6	188.2	170.3	143.4
92.5°	210.6	192.7	170.3	152.4	130.0
95°	192.7	179.3	161.3	143.4	125.5
97.5°	174.8	165.8	147.9	134.5	116.5
100°	165.8	152.4	138.9	125.5	112.0
102.5°	156.9	143.4	130.0	116.5	107.6
105°	143.4	134.5	121.0	107.6	98.6
107.5°	134.5	121.0	112.0	98.6	94.1
110°	121.0	112.0	103.1	94.1	89.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	107.6	103.1	94.1	85.2	80.7
115°	98.6	89.6	89.6	76.2	76.2
117.5°	89.6	80.7	80.7	71.7	71.7
120°	76.2	71.7	71.7	62.7	62.7
122.5°	67.2	62.7	62.7	58.3	58.3
125°	62.7	53.8	58.3	49.3	53.8
127.5°	53.8	49.3	49.3	44.8	49.3
130°	44.8	40.3	40.3	40.3	44.8
132.5°	40.3	35.9	35.9	35.9	40.3
135°	35.9	31.4	31.4	31.4	35.9
137.5°	31.4	26.9	22.4	26.9	31.4
140°	26.9	22.4	17.9	22.4	26.9
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)