

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: P384080

Luminaire Tested: **14ID-50-L840-CFD1**

Issue Date: 2/25/2020

Test Information

Test Method: LM-79-08
Report Number: P384080
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1911-572-67)
Test Lab: INNOVATION CENTER (G2)
Issue Date: 2/25/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: 14ID-50-L840-CFD1
Description: 1X4 IN DEPTH TROFFER WITH 1INCH DROP CUBE LENS

Light Source: -
Ballast/Driver: -

Summary

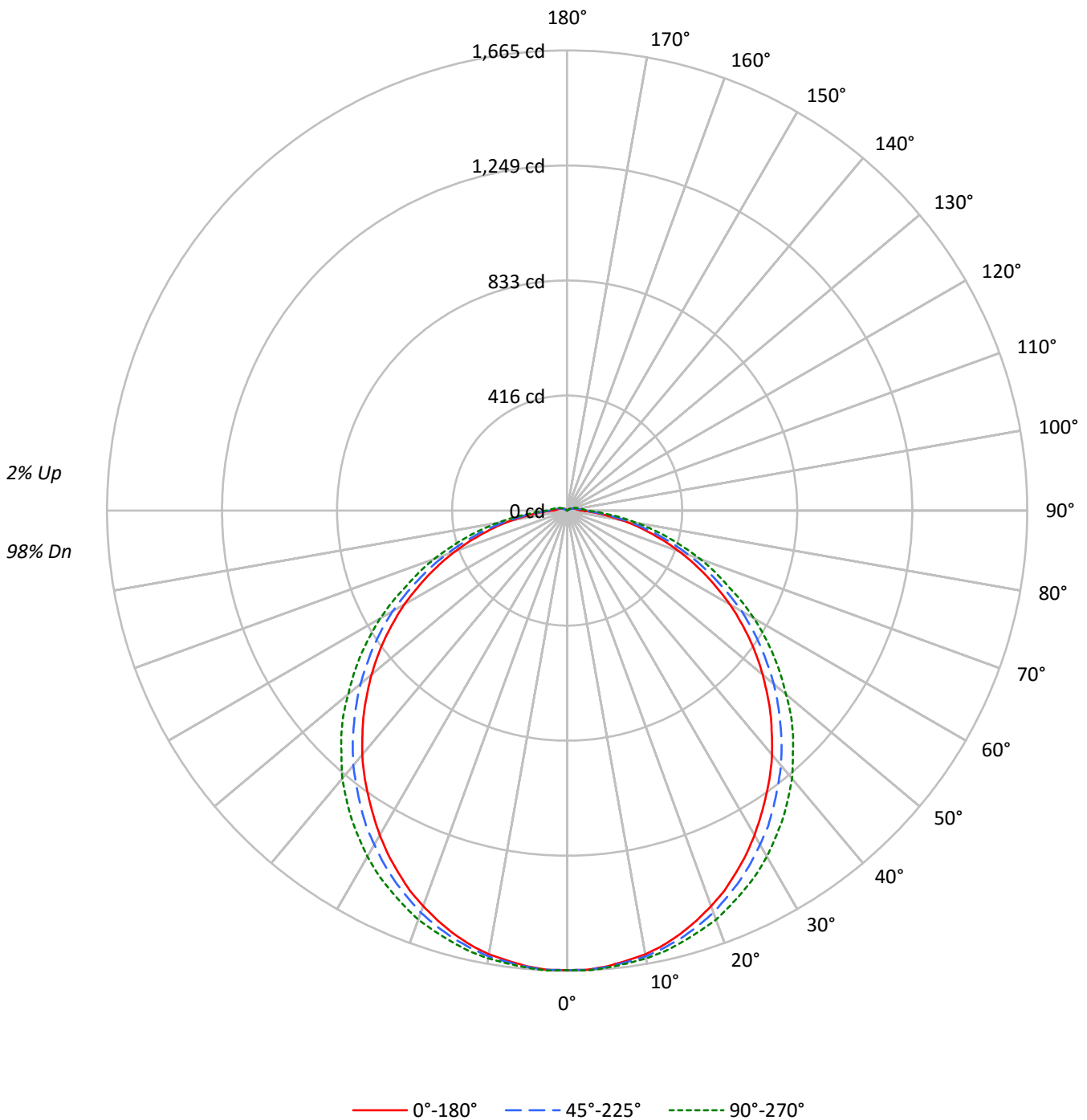
Lumens per Lamp: N/A
Luminaire Lumens: 4924.6 lumens
Efficiency: N/A
Efficacy: 114.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.08')
CIE Type: Direct

Input Watts (W): 43.1
Input Voltage (V): NR
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: 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	119	119	119	119	116	116	116	116	110	110	110	105	105	105	100	100	100	98
1	108	103	98	94	105	100	96	92	96	92	89	91	88	86	87	85	83	81
2	98	89	82	76	95	87	81	75	83	78	73	80	75	71	76	73	69	67
3	89	78	70	63	86	76	69	63	73	67	61	70	64	60	67	62	58	56
4	81	69	60	53	79	68	59	53	65	58	52	62	56	51	60	55	50	48
5	75	62	53	46	73	61	52	46	58	51	45	56	49	44	54	48	44	41
6	69	56	47	40	67	55	46	40	52	45	39	51	44	39	49	43	38	36
7	64	50	42	35	62	49	41	35	48	40	35	46	39	34	45	39	34	32
8	60	46	37	32	58	45	37	31	44	36	31	42	36	31	41	35	30	28
9	56	42	34	28	54	41	34	28	40	33	28	39	32	28	38	32	27	26
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4475	4475	4475
5°	4463	4449	4452
10°	4438	4418	4431
15°	4392	4372	4402
20°	4329	4317	4379
25°	4251	4243	4332
30°	4162	4160	4286
35°	4066	4072	4224
40°	3982	3981	4156
45°	3881	3867	4061
50°	3774	3757	3936
55°	3663	3625	3821
60°	3541	3480	3676
65°	3379	3268	3453
70°	3196	3055	3277
75°	2987	2769	3010
80°	2768	2429	2681
85°	2678	2092	2290



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.5	3.2
10°-20°	451.4	9.2
20°-30°	681.5	13.8
30°-40°	816.6	16.6
40°-50°	844.3	17.1
50°-60°	764.6	15.5
60°-70°	591.6	12.0
70°-80°	363.4	7.4
80°-90°	144.4	2.9
90°-100°	52.6	1.1
100°-110°	32.4	0.7
110°-120°	16.7	0.3
120°-130°	7.1	0.1
130°-140°	0.5	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1290.4	26.2
0°-40°	2107.0	42.8
0°-60°	3715.9	75.5
0°-90°	4815.3	97.8
90°-120°	101.7	2.1
90°-150°	109.3	2.2
90°-180°	109.0	2.2
0°-180°	4924.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1663	1663	1663	1663	1663	
5°	1655	1655	1658	1658	1660	157
15°	1585	1588	1600	1610	1615	447
25°	1446	1456	1478	1503	1516	666
35°	1256	1271	1303	1338	1361	786
45°	1041	1054	1091	1136	1156	802
55°	804	821	854	891	911	718
65°	554	567	594	624	639	548
75°	310	325	340	362	380	330
85°	107	115	125	137	145	107
90°	50	57	62	70	75	29
95°	37	42	47	52	57	30
105°	28	28	30	32	35	29
115°	18	15	15	18	20	18
125°	10	8	5	8	10	9
135°	0	0	0	0	0	1
145°	0	0	0	0	0	0
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°	1662.8	1662.8	1662.8	1662.8	1662.8
2.5°	1662.8	1660.3	1662.8	1662.8	1665.3
5°	1655.3	1655.3	1657.8	1657.8	1660.3
7.5°	1642.8	1642.8	1647.8	1650.3	1652.8
10°	1630.3	1630.3	1637.8	1640.3	1645.3
12.5°	1610.3	1612.8	1620.3	1627.8	1632.8
15°	1585.4	1587.9	1600.4	1610.3	1615.3
17.5°	1555.4	1560.4	1575.4	1590.4	1595.4
20°	1523.0	1530.4	1547.9	1565.4	1575.4
22.5°	1488.0	1493.0	1513.0	1535.4	1545.4
25°	1445.6	1455.5	1478.0	1503.0	1515.5
27.5°	1403.1	1413.1	1438.1	1468.0	1483.0
30°	1355.7	1365.7	1395.6	1428.1	1445.6
32.5°	1305.8	1318.2	1353.2	1385.6	1403.1
35°	1255.8	1270.8	1303.3	1338.2	1360.7
37.5°	1205.9	1218.4	1253.3	1290.8	1313.2
40°	1153.5	1165.9	1203.4	1240.8	1265.8
42.5°	1096.0	1111.0	1148.5	1188.4	1208.4
45°	1041.1	1053.6	1091.0	1136.0	1156.0
47.5°	981.2	998.7	1033.6	1076.1	1098.5
50°	923.8	938.7	976.2	1016.1	1033.6
52.5°	863.8	878.8	913.8	953.7	973.7
55°	803.9	821.4	853.9	891.3	911.3
57.5°	741.5	759.0	791.4	823.9	846.4
60°	681.6	699.1	729.0	761.5	781.5
62.5°	614.2	629.2	661.6	696.6	711.5
65°	554.3	566.7	594.2	624.2	639.1
67.5°	491.8	506.8	531.8	559.3	576.7
70°	429.4	446.9	466.9	491.8	511.8
72.5°	369.5	384.5	402.0	426.9	444.4
75°	309.6	324.6	339.5	362.0	379.5
77.5°	257.2	264.6	279.6	299.6	317.1
80°	199.7	209.7	222.2	242.2	254.7
82.5°	149.8	159.8	169.8	184.8	197.2
85°	107.4	114.8	124.8	137.3	144.8
87.5°	72.4	79.9	87.4	97.4	104.9
90°	49.9	57.4	62.4	69.9	74.9
92.5°	42.4	47.4	52.4	57.4	62.4
95°	37.4	42.4	47.4	52.4	57.4
97.5°	35.0	37.4	42.4	47.4	49.9
100°	32.5	35.0	37.4	42.4	44.9
102.5°	30.0	30.0	35.0	37.4	39.9
105°	27.5	27.5	30.0	32.5	35.0
107.5°	25.0	25.0	27.5	27.5	32.5
110°	22.5	20.0	22.5	22.5	27.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	20.0	17.5	20.0	20.0	22.5
115°	17.5	15.0	15.0	17.5	20.0
117.5°	15.0	12.5	12.5	12.5	17.5
120°	15.0	12.5	10.0	10.0	15.0
122.5°	12.5	10.0	7.5	10.0	12.5
125°	10.0	7.5	5.0	7.5	10.0
127.5°	7.5	7.5	2.5	5.0	7.5
130°	7.5	5.0	2.5	5.0	5.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
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	16.00	17.60	16.40	17.96	18.33	16.83	18.43	17.23	18.80	19.17
	3H	17.73	19.18	18.14	19.56	19.97	18.76	20.21	19.17	20.59	21.00
	4H	18.37	19.74	18.81	20.14	20.57	19.53	20.90	19.97	21.30	21.73
	6H	18.86	20.13	19.30	20.54	20.98	20.17	21.45	20.62	21.86	22.30
	8H	19.01	20.23	19.47	20.66	21.12	20.42	21.64	20.88	22.07	22.52
	12H	19.13	20.30	19.59	20.72	21.21	20.63	21.80	21.10	22.23	22.71
4H	2H	16.70	18.07	17.13	18.46	18.89	17.36	18.73	17.79	19.12	19.55
	3H	18.65	19.81	19.10	20.25	20.70	19.50	20.66	19.95	21.10	21.55
	4H	19.42	20.47	19.89	20.93	21.41	20.41	21.46	20.88	21.92	22.41
	6H	20.03	20.95	20.51	21.43	21.93	21.20	22.12	21.69	22.60	23.11
	8H	20.23	21.09	20.73	21.58	22.09	21.51	22.37	22.00	22.86	23.37
	12H	20.39	21.17	20.91	21.69	22.21	21.79	22.57	22.30	23.08	23.60
8H	4H	19.79	20.66	20.29	21.14	21.66	20.67	21.54	21.17	22.02	22.53
	6H	20.53	21.25	21.05	21.78	22.30	21.58	22.31	22.11	22.83	23.36
	8H	20.81	21.46	21.35	22.01	22.54	21.98	22.63	22.53	23.18	23.71
	12H	21.06	21.63	21.60	22.16	22.77	22.37	22.95	22.91	23.48	24.08
12H	4H	19.85	20.63	20.36	21.14	21.66	20.70	21.48	21.21	21.99	22.51
	6H	20.62	21.27	21.16	21.81	22.35	21.63	22.28	22.17	22.82	23.36
	8H	20.96	21.54	21.50	22.07	22.68	22.09	22.67	22.63	23.19	23.80