

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: P213038

Luminaire Tested: **DSI-WS-50L840-1D-UNV-4-STD-FC-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P213038
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35730)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: DSI-WS-50L840-1D-UNV-4-STD-FC-W
Description: DIVIDE 4' SUSPENDED WAVESTREAM LED LUMINAIRE
WaveStream SPECULAR OPTIC WITH FROSTED COVER, LIGHT LEVEL 4.
Light Source: (308) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5028.0 lumens
Efficiency: N/A
Efficacy: 133.0 lumens/watt
Spacing Criteria (0/90/45): 1.41 / 1.45 / 1.53
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Semi-Direct

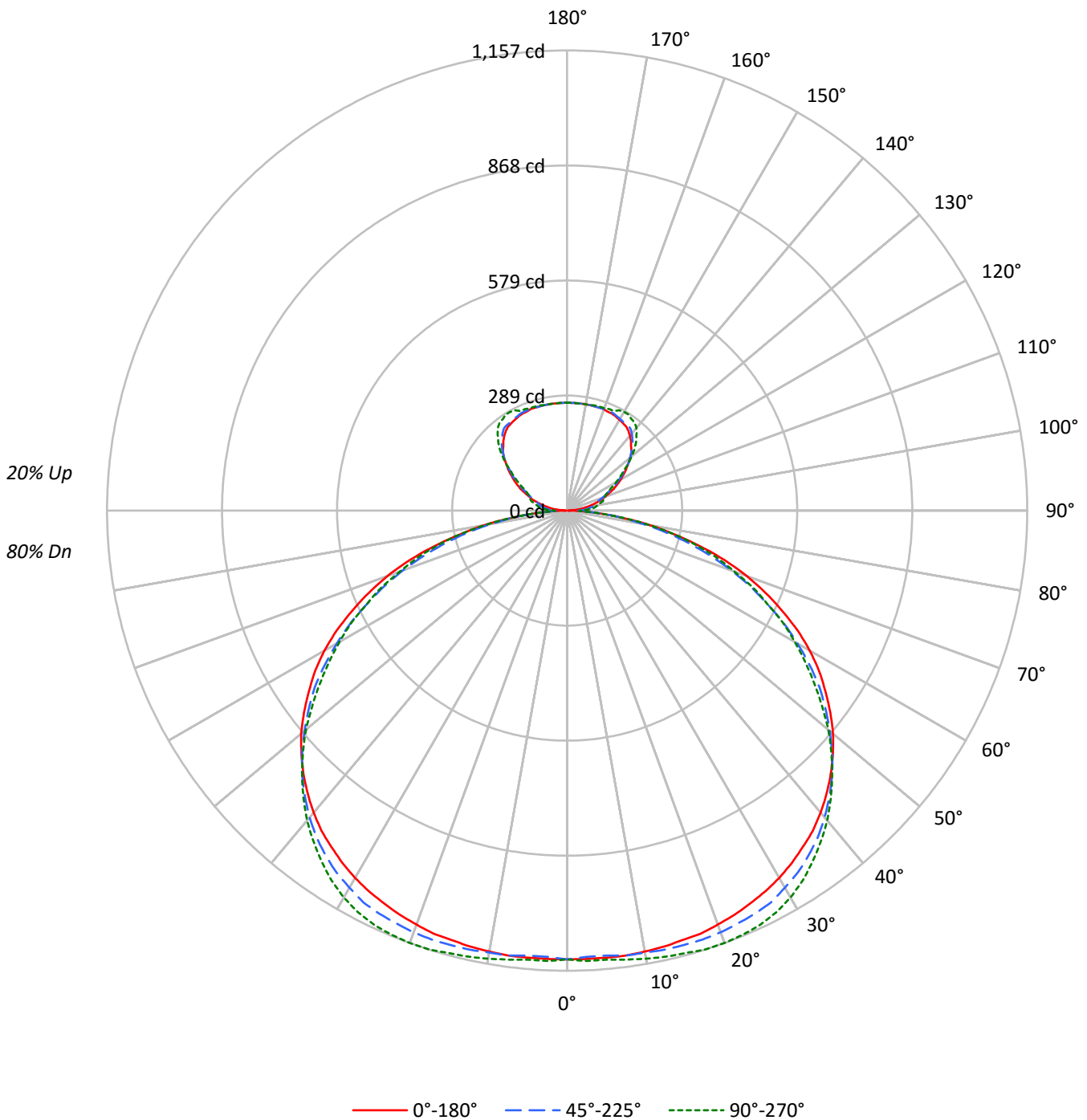
Input Watts (W): 37.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	114	114	114	114	109	109	109	109	100	100	100		92	92	92		84	84	84	80
1	104	99	94	90	99	95	91	87	87	84	81		80	77	75		73	71	69	66
2	94	85	78	73	89	82	76	70	75	70	66		69	65	61		63	60	57	54
3	85	74	66	60	81	71	64	58	66	59	54		60	55	51		55	51	48	45
4	78	65	57	50	74	63	55	48	58	51	46		53	48	43		49	44	40	38
5	71	58	49	42	67	56	47	41	51	44	39		47	41	37		44	39	35	32
6	65	52	43	37	62	50	42	36	46	39	34		43	37	32		39	34	30	28
7	60	47	38	32	57	45	37	31	42	35	30		39	33	28		36	31	27	24
8	56	43	34	28	53	41	33	28	38	31	26		35	29	25		33	27	24	21
9	52	39	31	25	50	37	30	25	35	28	23		32	26	22		30	25	21	19
10	49	36	28	23	47	34	27	22	32	26	21		30	24	20		28	23	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3802	3802	3802
5°	3817	3799	3834
10°	3852	3861	3914
15°	3900	3945	4017
20°	3972	4046	4148
25°	4051	4157	4272
30°	4149	4260	4370
35°	4248	4355	4429
40°	4361	4429	4475
45°	4467	4491	4491
50°	4575	4521	4494
55°	4657	4551	4459
60°	4750	4507	4455
65°	4756	4427	4427
70°	4732	4325	4401
75°	4505	4135	4370
80°	4108	3759	4059
85°	3193	3193	2996



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.9	2.1
10°-20°	321.4	6.4
20°-30°	516.7	10.3
30°-40°	661.7	13.2
40°-50°	726.3	14.4
50°-60°	692.6	13.8
60°-70°	561.8	11.2
70°-80°	348.1	6.9
80°-90°	100.3	2.0
90°-100°	51.2	1.0
100°-110°	85.8	1.7
110°-120°	120.3	2.4
120°-130°	158.8	3.2
130°-140°	179.9	3.6
140°-150°	166.6	3.3
150°-160°	125.7	2.5
160°-170°	77.0	1.5
170°-180°	25.9	0.5
0°-30°	946.1	18.8
0°-40°	1607.8	32.0
0°-60°	3026.7	60.2
0°-90°	4036.9	80.3
90°-120°	257.2	5.1
90°-150°	762.5	15.2
90°-180°	991.0	19.7
0°-180°	5028.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1128	1128	1128	1128	1128	
5°	1128	1128	1123	1134	1134	108
15°	1118	1123	1131	1146	1152	317
25°	1090	1100	1118	1141	1149	504
35°	1033	1043	1059	1072	1077	647
45°	937	942	942	945	942	723
55°	793	788	775	764	759	709
65°	596	584	555	558	555	590
75°	346	330	318	333	336	365
85°	83	80	83	83	78	94
90°	3	18	26	31	31	7
95°	23	39	52	62	65	25
105°	75	75	78	90	93	80
115°	129	126	119	114	114	127
125°	181	178	176	176	173	162
135°	227	225	232	243	245	176
145°	258	256	263	276	282	161
155°	268	268	271	274	276	124
165°	271	271	271	274	274	77
175°	271	271	271	271	271	26
180°	271	271	271	271	271	



TEST NUMBER: P213038

CATALOG NUMBER: DSI-WS-50L840-1D-UNV-4-STD-FC-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1128.4	1128.4	1128.4	1128.4	1128.4
2.5°	1128.4	1128.4	1123.2	1131.0	1133.5
5°	1128.4	1128.4	1123.2	1133.5	1133.5
7.5°	1128.4	1128.4	1128.4	1136.1	1138.7
10°	1125.8	1128.4	1128.4	1141.3	1143.9
12.5°	1123.2	1128.4	1131.0	1143.9	1149.0
15°	1118.1	1123.2	1131.0	1146.5	1151.6
17.5°	1115.5	1120.6	1131.0	1151.6	1156.8
20°	1107.7	1115.5	1128.4	1149.0	1156.8
22.5°	1100.0	1107.7	1123.2	1146.5	1154.2
25°	1089.7	1100.0	1118.1	1141.3	1149.0
27.5°	1079.3	1089.7	1110.3	1131.0	1138.7
30°	1066.4	1076.7	1094.8	1115.5	1123.2
32.5°	1050.9	1061.2	1079.3	1097.4	1102.6
35°	1032.8	1043.2	1058.7	1071.6	1076.7
37.5°	1014.8	1022.5	1035.4	1045.8	1048.3
40°	991.5	999.3	1007.0	1014.8	1017.4
42.5°	965.7	973.5	976.0	981.2	981.2
45°	937.3	942.5	942.5	945.1	942.5
47.5°	906.3	908.9	903.7	903.7	901.2
50°	872.8	872.8	862.4	859.8	857.3
52.5°	834.0	831.4	818.5	813.4	808.2
55°	792.7	787.5	774.6	764.3	759.1
57.5°	751.4	743.6	723.0	712.7	710.1
60°	704.9	694.6	668.8	661.0	661.0
62.5°	653.3	640.4	614.5	609.4	612.0
65°	596.5	583.6	555.2	557.7	555.2
67.5°	539.7	524.2	498.3	503.5	506.1
70°	480.3	464.8	439.0	446.7	446.7
72.5°	415.7	397.6	377.0	392.5	395.1
75°	346.0	330.5	317.6	333.1	335.7
77.5°	276.3	266.0	255.6	273.7	276.3
80°	211.7	198.8	193.7	209.2	209.2
82.5°	139.4	136.9	139.4	147.2	144.6
85°	82.6	80.0	82.6	82.6	77.5
87.5°	36.1	36.1	33.6	28.4	31.0
90°	2.6	18.1	25.8	31.0	31.0
92.5°	12.9	31.0	43.9	49.1	49.1
95°	23.2	38.7	51.6	62.0	64.6
97.5°	36.1	43.9	59.4	69.7	72.3
100°	49.1	49.1	67.1	74.9	77.5
102.5°	62.0	62.0	72.3	82.6	85.2
105°	74.9	74.9	77.5	90.4	93.0
107.5°	90.4	87.8	82.6	93.0	98.1
110°	100.7	100.7	95.5	98.1	100.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	113.6	113.6	105.9	103.3	105.9
115°	129.1	126.5	118.8	113.6	113.6
117.5°	142.0	139.4	134.3	129.1	126.5
120°	154.9	152.3	147.2	144.6	142.0
122.5°	167.8	167.8	162.7	160.1	157.5
125°	180.7	178.2	175.6	175.6	173.0
127.5°	193.7	191.1	193.7	193.7	193.7
130°	206.6	201.4	206.6	209.2	211.7
132.5°	219.5	214.3	219.5	227.2	229.8
135°	227.2	224.6	232.4	242.7	245.3
137.5°	237.6	235.0	242.7	255.6	258.2
140°	245.3	245.3	253.0	266.0	271.1
142.5°	253.0	250.5	260.8	271.1	278.9
145°	258.2	255.6	263.4	276.3	281.5
147.5°	260.8	260.8	263.4	281.5	286.6
150°	263.4	263.4	266.0	281.5	286.6
152.5°	266.0	266.0	268.5	276.3	284.0
155°	268.5	268.5	271.1	273.7	276.3
157.5°	268.5	268.5	271.1	273.7	276.3
160°	271.1	271.1	271.1	273.7	273.7
162.5°	271.1	271.1	271.1	273.7	273.7
165°	271.1	271.1	271.1	273.7	273.7
167.5°	271.1	271.1	271.1	271.1	271.1
170°	271.1	271.1	271.1	271.1	271.1
172.5°	271.1	271.1	271.1	271.1	271.1
175°	271.1	271.1	271.1	271.1	271.1
177.5°	271.1	271.1	271.1	271.1	271.1
180°	271.1	271.1	271.1	271.1	271.1

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