

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: P213007

Luminaire Tested: **DSI-WS-20L840-1D-UNV-4-STD-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P213007
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35728)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: DSI-WS-20L840-1D-UNV-4-STD-W
Description: DIVIDE 4' SUSPENDED WAVESTREAM LED LUMINAIRE
WaveStream SPECULAR OPTIC, LIGHT LEVEL 1.
Light Source: (308) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2093.6 lumens
Efficiency: N/A
Efficacy: 137.7 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.47 / 1.54
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Semi-Direct

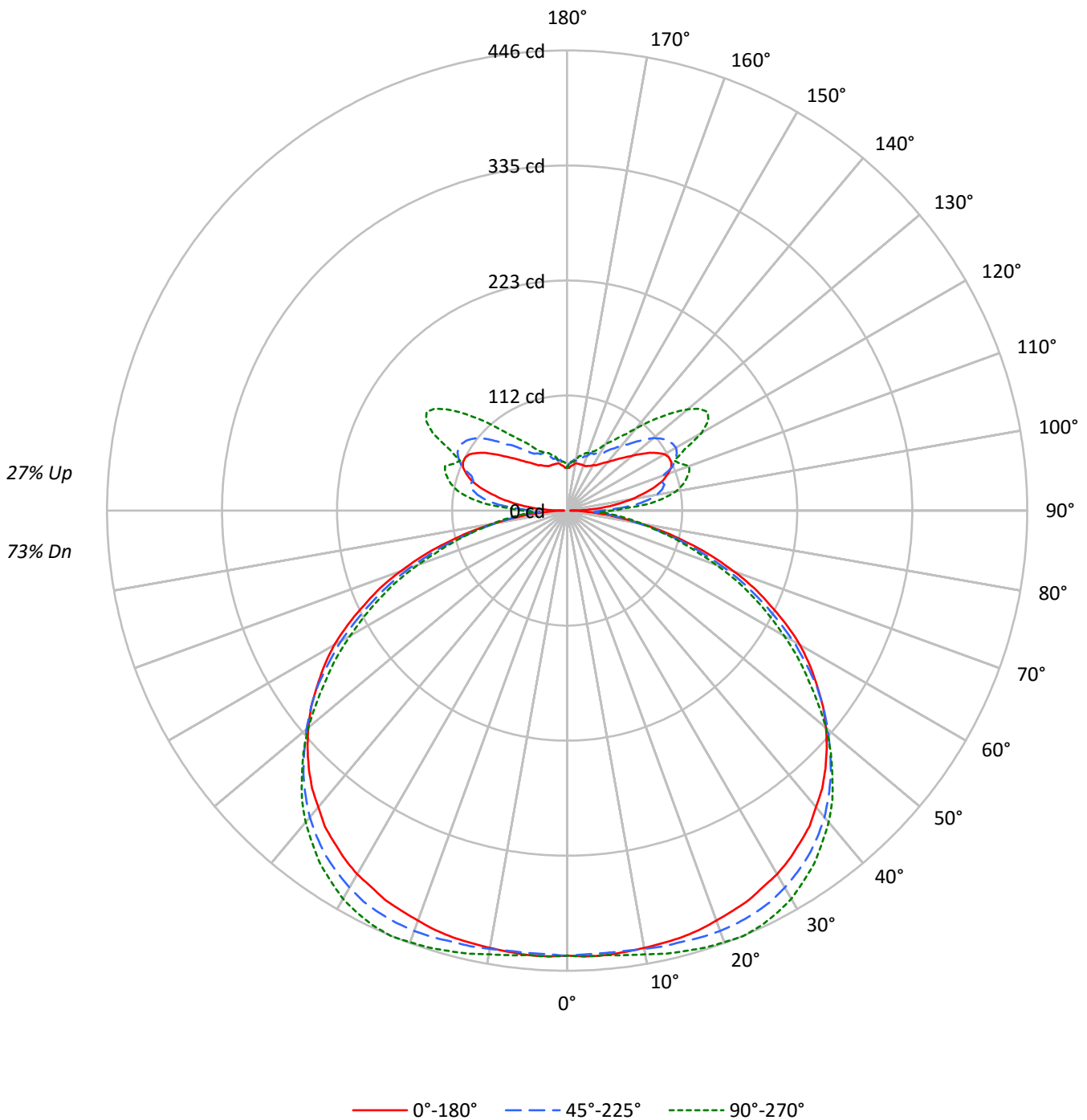
Input Watts (W): 15.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77	73
1	102	97	93	89	97	92	89	85	83	80	78	75	73	70	67	65	64	60
2	92	84	77	72	87	80	74	69	72	67	63	65	61	58	58	55	53	49
3	84	74	65	59	79	70	63	57	63	57	52	57	52	48	51	47	44	41
4	77	65	56	49	72	62	54	48	56	49	44	50	45	41	45	41	37	34
5	70	57	49	42	66	55	47	41	50	43	38	45	39	35	40	36	32	29
6	65	51	43	36	61	49	41	35	45	38	33	40	35	30	36	32	28	25
7	60	46	38	32	56	44	36	31	40	34	29	37	31	27	33	28	25	22
8	55	42	34	28	52	40	32	27	37	30	25	33	28	24	30	26	22	20
9	51	38	30	25	49	37	29	24	34	27	23	31	25	21	28	23	20	18
10	48	35	27	22	46	34	27	22	31	25	20	28	23	19	26	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1454	1454	1454
5°	1463	1456	1463
10°	1473	1476	1494
15°	1494	1509	1542
20°	1516	1554	1596
25°	1549	1600	1651
30°	1584	1642	1691
35°	1618	1679	1718
40°	1650	1707	1734
45°	1687	1723	1733
50°	1717	1728	1717
55°	1737	1731	1675
60°	1758	1707	1636
65°	1733	1657	1589
70°	1692	1598	1514
75°	1587	1491	1435
80°	1378	1337	1440
85°	1106	1477	1720



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.3	2.0
10°-20°	123.1	5.9
20°-30°	198.6	9.5
30°-40°	254.5	12.2
40°-50°	277.9	13.3
50°-60°	261.2	12.5
60°-70°	206.1	9.8
70°-80°	122.1	5.8
80°-90°	44.8	2.1
90°-100°	65.9	3.1
100°-110°	103.9	5.0
110°-120°	114.0	5.4
120°-130°	111.4	5.3
130°-140°	76.1	3.6
140°-150°	45.7	2.2
150°-160°	27.4	1.3
160°-170°	14.9	0.7
170°-180°	4.5	0.2
0°-30°	363.0	17.3
0°-40°	617.5	29.5
0°-60°	1156.7	55.2
0°-90°	1529.7	73.1
90°-120°	283.8	13.6
90°-150°	517.0	24.7
90°-180°	564.0	26.9
0°-180°	2093.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	431	431	431	431	431	
5°	432	432	430	432	432	41
15°	428	429	432	440	442	121
25°	417	421	430	441	444	192
35°	393	399	408	417	418	246
45°	354	357	362	365	364	273
55°	296	297	295	289	285	264
65°	217	215	208	204	199	215
75°	122	120	114	110	110	129
85°	29	31	38	44	44	32
90°	3	19	33	40	44	5
95°	36	51	67	78	82	35
105°	88	84	98	114	120	91
115°	111	107	116	114	114	109
125°	98	104	119	150	166	87
135°	71	80	94	116	128	55
145°	55	64	72	82	86	35
155°	48	54	60	62	64	22
165°	47	51	52	54	55	13
175°	44	48	47	48	48	4
180°	41	41	41	41	41	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	431.4	431.4	431.4	431.4	431.4
2.5°	432.5	432.5	430.4	432.5	432.5
5°	432.5	432.5	430.4	432.5	432.5
7.5°	431.4	431.4	430.4	434.6	434.6
10°	430.4	431.4	431.4	436.7	436.7
12.5°	429.3	430.4	432.5	437.8	439.9
15°	428.2	429.3	432.5	439.9	442.0
17.5°	426.1	428.2	433.5	442.0	444.1
20°	422.9	426.1	433.5	443.1	445.2
22.5°	419.8	424.0	432.5	442.0	446.3
25°	416.6	420.8	430.4	441.0	444.1
27.5°	411.3	416.6	427.2	436.7	439.9
30°	407.0	412.3	421.9	431.4	434.6
32.5°	400.7	406.0	415.5	424.0	426.1
35°	393.3	398.6	408.1	416.6	417.6
37.5°	385.8	391.1	398.6	404.9	406.0
40°	375.2	380.5	388.0	392.2	394.3
42.5°	365.7	371.0	375.2	379.5	380.5
45°	354.0	357.2	361.5	364.6	363.6
47.5°	341.3	344.5	345.6	348.7	346.6
50°	327.5	329.7	329.7	329.7	327.5
52.5°	312.7	312.7	312.7	309.5	306.3
55°	295.7	296.8	294.7	289.4	285.1
57.5°	278.8	278.8	273.5	268.2	265.0
60°	260.8	257.6	253.3	245.9	242.7
62.5°	239.6	236.4	230.0	224.7	221.5
65°	217.3	215.2	207.8	203.5	199.3
67.5°	196.1	192.9	185.5	179.1	178.1
70°	171.7	169.6	162.2	156.9	153.7
72.5°	147.3	144.2	137.8	133.6	130.4
75°	121.9	119.8	114.5	110.2	110.2
77.5°	97.5	95.4	90.1	90.1	90.1
80°	71.0	71.0	68.9	72.1	74.2
82.5°	48.8	48.8	51.9	57.2	58.3
85°	28.6	30.7	38.2	43.5	44.5
87.5°	12.7	18.0	26.5	30.7	31.8
90°	3.2	19.1	32.9	40.3	43.5
92.5°	19.1	36.0	49.8	55.1	57.2
95°	36.0	50.9	66.8	78.4	81.6
97.5°	49.8	60.4	79.5	92.2	95.4
100°	63.6	64.7	88.0	102.8	107.1
102.5°	75.3	74.2	94.3	109.2	114.5
105°	88.0	83.7	97.5	114.5	119.8
107.5°	97.5	91.2	95.4	118.7	124.0
110°	103.9	98.6	98.6	115.5	126.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	109.2	103.9	110.2	110.2	118.7
115°	111.3	107.1	115.5	114.5	114.5
117.5°	111.3	109.2	119.8	134.6	128.3
120°	109.2	110.2	121.9	147.3	150.5
122.5°	103.9	108.1	120.8	151.6	162.2
125°	97.5	103.9	118.7	149.5	166.4
127.5°	90.1	98.6	114.5	145.2	162.2
130°	82.7	92.2	109.2	136.7	152.6
132.5°	76.3	86.9	101.8	126.1	141.0
135°	71.0	79.5	94.3	115.5	128.3
137.5°	65.7	75.3	86.9	106.0	116.6
140°	61.5	72.1	82.7	95.4	103.9
142.5°	58.3	67.8	76.3	86.9	93.3
145°	55.1	63.6	72.1	81.6	85.9
147.5°	51.9	61.5	66.8	76.3	79.5
150°	50.9	58.3	63.6	71.0	74.2
152.5°	48.8	55.1	62.5	66.8	67.8
155°	47.7	54.1	60.4	62.5	63.6
157.5°	46.6	54.1	60.4	60.4	61.5
160°	46.6	50.9	56.2	60.4	59.4
162.5°	46.6	49.8	55.1	59.4	58.3
165°	46.6	50.9	51.9	54.1	55.1
167.5°	46.6	49.8	51.9	53.0	54.1
170°	46.6	47.7	48.8	51.9	49.8
172.5°	44.5	47.7	49.8	48.8	47.7
175°	43.5	47.7	46.6	47.7	47.7
177.5°	41.3	43.5	45.6	46.6	46.6
180°	41.3	41.3	41.3	41.3	41.3

(END OF REPORT)