

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: P213035

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P213035
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-20L840-1D-UNV-4-STD-FC-W
Description: DIVIDE 4' SUSPENDED WAVESTREAM LED LUMINAIRE
WaveStream SPECULAR OPTIC WITH FROSTED COVER, LIGHT LEVEL 1.
Light Source: (308) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2064.0 lumens
Efficiency: N/A
Efficacy: 135.8 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

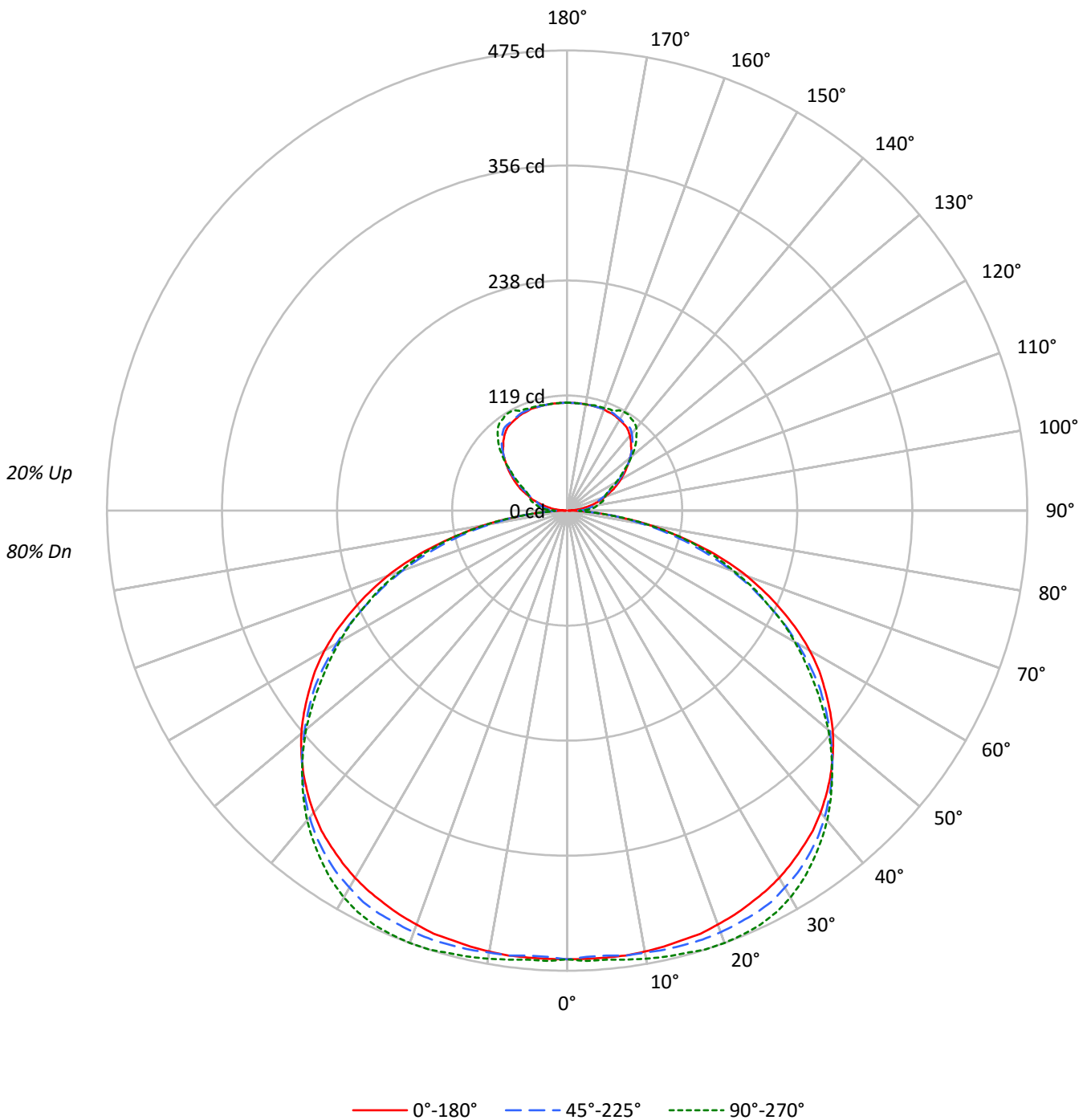
Input Watts (W): 15.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1561	1561	1561
5°	1567	1560	1574
10°	1581	1585	1607
15°	1601	1620	1649
20°	1630	1661	1703
25°	1663	1707	1754
30°	1703	1749	1794
35°	1744	1788	1818
40°	1790	1818	1837
45°	1834	1844	1844
50°	1878	1856	1845
55°	1912	1868	1831
60°	1950	1850	1829
65°	1953	1817	1817
70°	1943	1775	1807
75°	1849	1698	1794
80°	1686	1543	1667
85°	1311	1311	1229



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.3	2.1
10°-20°	131.9	6.4
20°-30°	212.1	10.3
30°-40°	271.7	13.2
40°-50°	298.2	14.4
50°-60°	284.3	13.8
60°-70°	230.7	11.2
70°-80°	142.9	6.9
80°-90°	41.2	2.0
90°-100°	21.0	1.0
100°-110°	35.2	1.7
110°-120°	49.4	2.4
120°-130°	65.2	3.2
130°-140°	73.8	3.6
140°-150°	68.4	3.3
150°-160°	51.6	2.5
160°-170°	31.6	1.5
170°-180°	10.6	0.5
0°-30°	388.4	18.8
0°-40°	660.0	32.0
0°-60°	1242.5	60.2
0°-90°	1657.2	80.3
90°-120°	105.6	5.1
90°-150°	313.0	15.2
90°-180°	407.0	19.7
0°-180°	2064.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	463	463	463	463	463	
5°	463	463	461	465	465	44
15°	459	461	464	471	473	130
25°	447	452	459	468	472	207
35°	424	428	435	440	442	266
45°	385	387	387	388	387	297
55°	325	323	318	314	312	291
65°	245	240	228	229	228	242
75°	142	136	130	137	138	150
85°	34	33	34	34	32	39
90°	1	7	11	13	13	3
95°	10	16	21	25	26	10
105°	31	31	32	37	38	33
115°	53	52	49	47	47	52
125°	74	73	72	72	71	66
135°	93	92	95	100	101	72
145°	106	105	108	113	116	66
155°	110	110	111	112	113	51
165°	111	111	111	112	112	32
175°	111	111	111	111	111	11
180°	111	111	111	111	111	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	463.2	463.2	463.2	463.2	463.2
2.5°	463.2	463.2	461.1	464.3	465.3
5°	463.2	463.2	461.1	465.3	465.3
7.5°	463.2	463.2	463.2	466.4	467.5
10°	462.2	463.2	463.2	468.5	469.6
12.5°	461.1	463.2	464.3	469.6	471.7
15°	459.0	461.1	464.3	470.6	472.8
17.5°	457.9	460.0	464.3	472.8	474.9
20°	454.7	457.9	463.2	471.7	474.9
22.5°	451.6	454.7	461.1	470.6	473.8
25°	447.3	451.6	459.0	468.5	471.7
27.5°	443.1	447.3	455.8	464.3	467.5
30°	437.8	442.0	449.4	457.9	461.1
32.5°	431.4	435.7	443.1	450.5	452.6
35°	424.0	428.2	434.6	439.9	442.0
37.5°	416.6	419.8	425.1	429.3	430.4
40°	407.0	410.2	413.4	416.6	417.6
42.5°	396.4	399.6	400.7	402.8	402.8
45°	384.8	386.9	386.9	388.0	386.9
47.5°	372.1	373.1	371.0	371.0	369.9
50°	358.3	358.3	354.0	353.0	351.9
52.5°	342.4	341.3	336.0	333.9	331.8
55°	325.4	323.3	318.0	313.8	311.6
57.5°	308.5	305.3	296.8	292.6	291.5
60°	289.4	285.1	274.5	271.4	271.4
62.5°	268.2	262.9	252.3	250.2	251.2
65°	244.9	239.6	227.9	229.0	227.9
67.5°	221.5	215.2	204.6	206.7	207.8
70°	197.2	190.8	180.2	183.4	183.4
72.5°	170.7	163.2	154.8	161.1	162.2
75°	142.0	135.7	130.4	136.7	137.8
77.5°	113.4	109.2	104.9	112.4	113.4
80°	86.9	81.6	79.5	85.9	85.9
82.5°	57.2	56.2	57.2	60.4	59.4
85°	33.9	32.9	33.9	33.9	31.8
87.5°	14.8	14.8	13.8	11.7	12.7
90°	1.1	7.4	10.6	12.7	12.7
92.5°	5.3	12.7	18.0	20.1	20.1
95°	9.5	15.9	21.2	25.4	26.5
97.5°	14.8	18.0	24.4	28.6	29.7
100°	20.1	20.1	27.6	30.7	31.8
102.5°	25.4	25.4	29.7	33.9	35.0
105°	30.7	30.7	31.8	37.1	38.2
107.5°	37.1	36.0	33.9	38.2	40.3
110°	41.3	41.3	39.2	40.3	41.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	46.6	46.6	43.5	42.4	43.5
115°	53.0	51.9	48.8	46.6	46.6
117.5°	58.3	57.2	55.1	53.0	51.9
120°	63.6	62.5	60.4	59.4	58.3
122.5°	68.9	68.9	66.8	65.7	64.7
125°	74.2	73.1	72.1	72.1	71.0
127.5°	79.5	78.4	79.5	79.5	79.5
130°	84.8	82.7	84.8	85.9	86.9
132.5°	90.1	88.0	90.1	93.3	94.3
135°	93.3	92.2	95.4	99.6	100.7
137.5°	97.5	96.5	99.6	104.9	106.0
140°	100.7	100.7	103.9	109.2	111.3
142.5°	103.9	102.8	107.1	111.3	114.5
145°	106.0	104.9	108.1	113.4	115.5
147.5°	107.1	107.1	108.1	115.5	117.7
150°	108.1	108.1	109.2	115.5	117.7
152.5°	109.2	109.2	110.2	113.4	116.6
155°	110.2	110.2	111.3	112.4	113.4
157.5°	110.2	110.2	111.3	112.4	113.4
160°	111.3	111.3	111.3	112.4	112.4
162.5°	111.3	111.3	111.3	112.4	112.4
165°	111.3	111.3	111.3	112.4	112.4
167.5°	111.3	111.3	111.3	111.3	111.3
170°	111.3	111.3	111.3	111.3	111.3
172.5°	111.3	111.3	111.3	111.3	111.3
175°	111.3	111.3	111.3	111.3	111.3
177.5°	111.3	111.3	111.3	111.3	111.3
180°	111.3	111.3	111.3	111.3	111.3

(END OF REPORT)