

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: P213037

Luminaire Tested: **DSI-WS-40L840-1D-UNV-4-STD-FC-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P213037
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-40L840-1D-UNV-4-STD-FC-W
Description: DIVIDE 4' SUSPENDED WAVESTREAM LED LUMINAIRE
WaveStream SPECULAR OPTIC WITH FROSTED COVER, LIGHT LEVEL 3.
Light Source: (308) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3986.4 lumens
Efficiency: N/A
Efficacy: 132.9 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

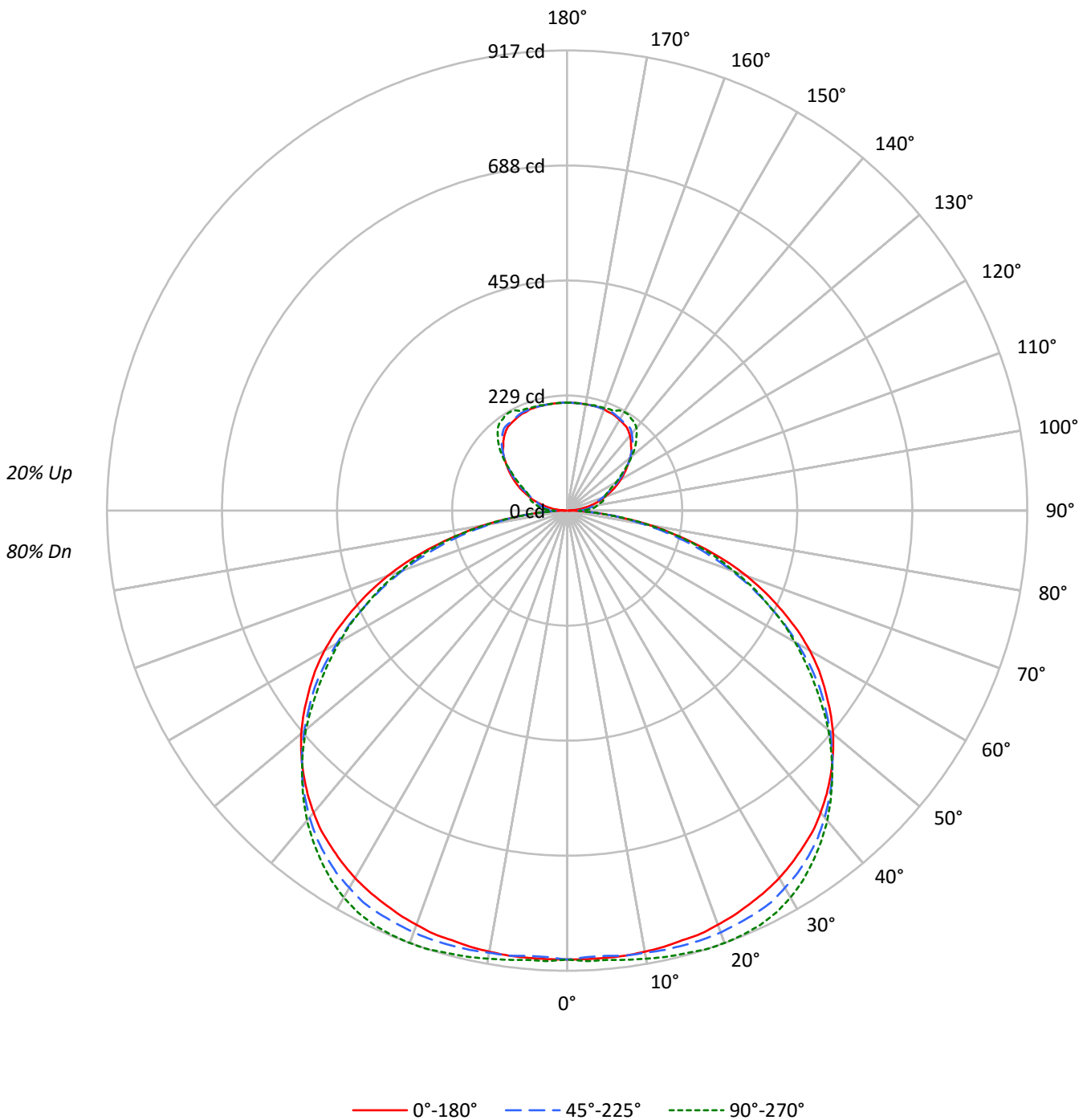
Input Watts (W): 30
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3014	3014	3014
5°	3026	3012	3040
10°	3054	3061	3103
15°	3092	3128	3185
20°	3149	3208	3289
25°	3212	3296	3387
30°	3290	3377	3465
35°	3369	3453	3512
40°	3458	3512	3548
45°	3541	3561	3561
50°	3628	3585	3563
55°	3692	3608	3536
60°	3767	3573	3532
65°	3770	3509	3509
70°	3752	3428	3490
75°	3571	3278	3464
80°	3258	2979	3217
85°	2532	2532	2374



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.6	2.1
10°-20°	254.8	6.4
20°-30°	409.7	10.3
30°-40°	524.7	13.2
40°-50°	575.9	14.4
50°-60°	549.1	13.8
60°-70°	445.4	11.2
70°-80°	276.0	6.9
80°-90°	79.5	2.0
90°-100°	40.6	1.0
100°-110°	68.0	1.7
110°-120°	95.4	2.4
120°-130°	125.9	3.2
130°-140°	142.6	3.6
140°-150°	132.1	3.3
150°-160°	99.6	2.5
160°-170°	61.1	1.5
170°-180°	20.5	0.5
0°-30°	750.1	18.8
0°-40°	1274.7	32.0
0°-60°	2399.7	60.2
0°-90°	3200.6	80.3
90°-120°	203.9	5.1
90°-150°	604.5	15.2
90°-180°	786.0	19.7
0°-180°	3986.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	895	895	895	895	895	
5°	895	895	890	899	899	85
15°	886	890	897	909	913	251
25°	864	872	886	905	911	399
35°	819	827	839	850	854	513
45°	743	747	747	749	747	573
55°	628	624	614	606	602	562
65°	473	463	440	442	440	468
75°	274	262	252	264	266	289
85°	66	64	66	66	61	75
90°	2	14	20	25	25	6
95°	18	31	41	49	51	19
105°	59	59	61	72	74	63
115°	102	100	94	90	90	101
125°	143	141	139	139	137	128
135°	180	178	184	192	194	139
145°	205	203	209	219	223	128
155°	213	213	215	217	219	98
165°	215	215	215	217	217	61
175°	215	215	215	215	215	21
180°	215	215	215	215	215	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	894.6	894.6	894.6	894.6	894.6
2.5°	894.6	894.6	890.5	896.7	898.7
5°	894.6	894.6	890.5	898.7	898.7
7.5°	894.6	894.6	894.6	900.8	902.8
10°	892.6	894.6	894.6	904.9	906.9
12.5°	890.5	894.6	896.7	906.9	911.0
15°	886.4	890.5	896.7	909.0	913.1
17.5°	884.4	888.5	896.7	913.1	917.1
20°	878.3	884.4	894.6	911.0	917.1
22.5°	872.1	878.3	890.5	909.0	915.1
25°	863.9	872.1	886.4	904.9	911.0
27.5°	855.7	863.9	880.3	896.7	902.8
30°	845.5	853.7	868.0	884.4	890.5
32.5°	833.2	841.4	855.7	870.1	874.2
35°	818.9	827.1	839.4	849.6	853.7
37.5°	804.6	810.7	820.9	829.1	831.2
40°	786.1	792.3	798.4	804.6	806.6
42.5°	765.7	771.8	773.8	777.9	777.9
45°	743.1	747.2	747.2	749.3	747.2
47.5°	718.6	720.6	716.5	716.5	714.5
50°	692.0	692.0	683.8	681.7	679.7
52.5°	661.2	659.2	649.0	644.9	640.8
55°	628.5	624.4	614.2	606.0	601.9
57.5°	595.7	589.6	573.2	565.0	563.0
60°	558.9	550.7	530.2	524.1	524.1
62.5°	517.9	507.7	487.2	483.1	485.2
65°	472.9	462.7	440.1	442.2	440.1
67.5°	427.9	415.6	395.1	399.2	401.3
70°	380.8	368.5	348.0	354.2	354.2
72.5°	329.6	315.3	298.9	311.2	313.2
75°	274.3	262.0	251.8	264.1	266.1
77.5°	219.1	210.9	202.7	217.0	219.1
80°	167.9	157.6	153.5	165.8	165.8
82.5°	110.5	108.5	110.5	116.7	114.6
85°	65.5	63.5	65.5	65.5	61.4
87.5°	28.7	28.7	26.6	22.5	24.6
90°	2.0	14.3	20.5	24.6	24.6
92.5°	10.2	24.6	34.8	38.9	38.9
95°	18.4	30.7	40.9	49.1	51.2
97.5°	28.7	34.8	47.1	55.3	57.3
100°	38.9	38.9	53.2	59.4	61.4
102.5°	49.1	49.1	57.3	65.5	67.6
105°	59.4	59.4	61.4	71.7	73.7
107.5°	71.7	69.6	65.5	73.7	77.8
110°	79.8	79.8	75.7	77.8	79.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	90.1	90.1	83.9	81.9	83.9
115°	102.4	100.3	94.2	90.1	90.1
117.5°	112.6	110.5	106.5	102.4	100.3
120°	122.8	120.8	116.7	114.6	112.6
122.5°	133.1	133.1	129.0	126.9	124.9
125°	143.3	141.3	139.2	139.2	137.2
127.5°	153.5	151.5	153.5	153.5	153.5
130°	163.8	159.7	163.8	165.8	167.9
132.5°	174.0	169.9	174.0	180.2	182.2
135°	180.2	178.1	184.2	192.4	194.5
137.5°	188.3	186.3	192.4	202.7	204.7
140°	194.5	194.5	200.6	210.9	215.0
142.5°	200.6	198.6	206.8	215.0	221.1
145°	204.7	202.7	208.8	219.1	223.1
147.5°	206.8	206.8	208.8	223.1	227.2
150°	208.8	208.8	210.9	223.1	227.2
152.5°	210.9	210.9	212.9	219.1	225.2
155°	212.9	212.9	215.0	217.0	219.1
157.5°	212.9	212.9	215.0	217.0	219.1
160°	215.0	215.0	215.0	217.0	217.0
162.5°	215.0	215.0	215.0	217.0	217.0
165°	215.0	215.0	215.0	217.0	217.0
167.5°	215.0	215.0	215.0	215.0	215.0
170°	215.0	215.0	215.0	215.0	215.0
172.5°	215.0	215.0	215.0	215.0	215.0
175°	215.0	215.0	215.0	215.0	215.0
177.5°	215.0	215.0	215.0	215.0	215.0
180°	215.0	215.0	215.0	215.0	215.0

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