

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: METALUX

Report Number: P231408

Luminaire Tested: **SSLED-LD5-12-W-UNV-L840-CD1-U-FRR22**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P231408
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-2)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SSLED-LD5-12-W-UNV-L840-CD1-U-FRR22
Description: STEELER WHITE REFRACTOR LENS
Light Source: (240) 4000 CCT, 80 CRI LEDS
Ballast/Driver: (1) ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12308.0 lumens
Efficiency: N/A
Efficacy: 144.3 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.43 / 1.45
Luminous Opening: Vertical Cylinder (Dia: 1.83' x H: 1')
CIE Type: Direct

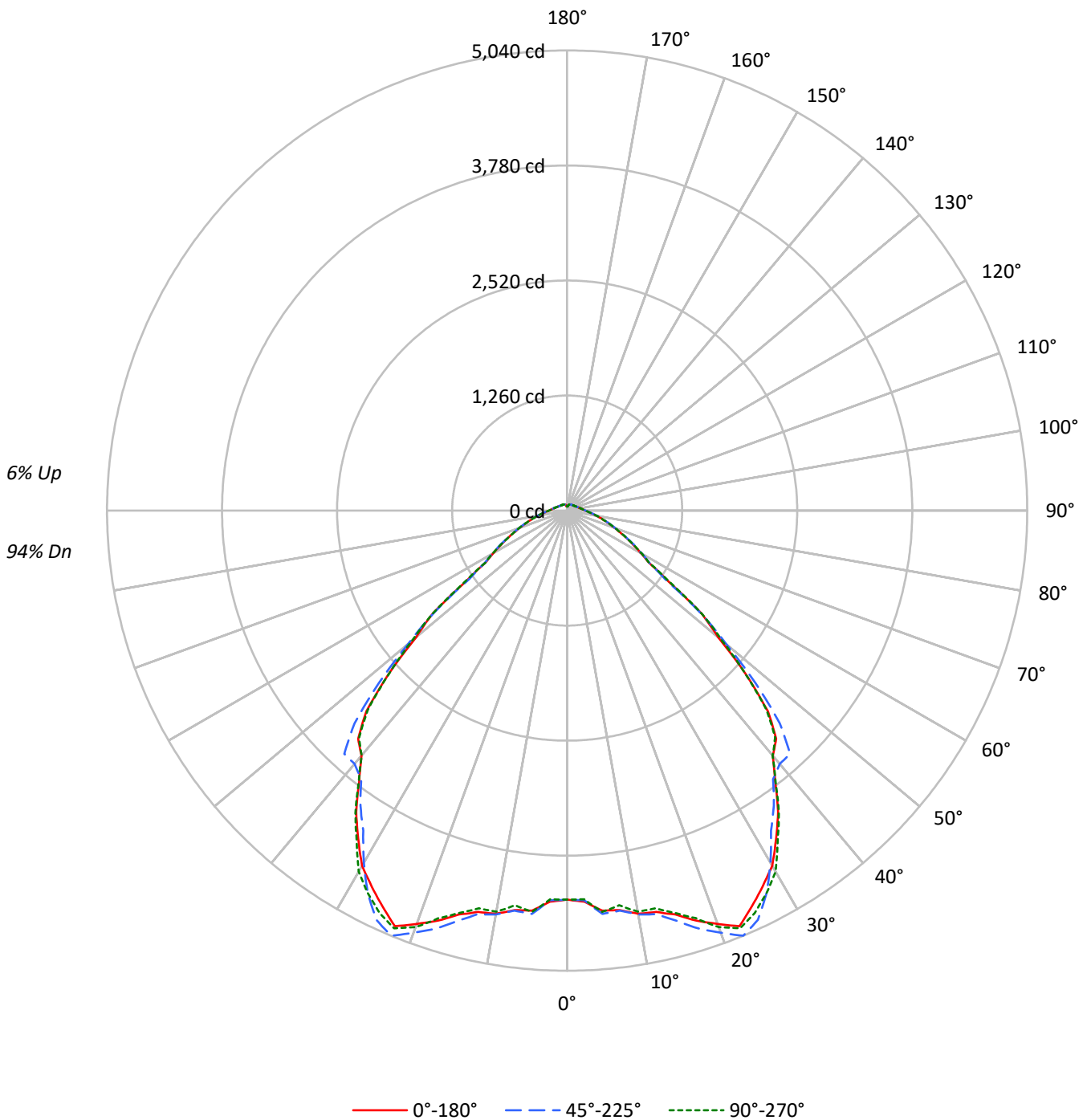
Input Watts (W): 85.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P231408

CATALOG NUMBER: SSLED-LD5-12-W-UNV-L840-CD1-U-FRR22

Luminous Intensity Polar Plot





TEST NUMBER: P231408

CATALOG NUMBER: SSLED-LD5-12-W-UNV-L840-CD1-U-FRR22

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	50	30	10	0	
RCR																						
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	97	97	97	94				
1	109	104	100	97	105	101	98	95	96	93	91	91	89	87	87	85	84	81				
2	100	93	87	81	97	90	85	80	86	81	77	82	78	75	78	75	72	70				
3	92	83	75	69	89	81	74	69	77	71	67	74	69	65	70	66	63	61				
4	85	74	66	60	82	72	65	59	69	63	58	66	61	57	64	59	55	53				
5	79	67	59	53	76	65	58	52	63	56	51	60	55	50	58	53	49	47				
6	73	61	52	46	71	59	52	46	57	50	45	55	49	44	53	48	44	42				
7	68	55	47	41	66	54	47	41	52	45	40	50	44	40	49	43	39	37				
8	63	51	43	37	61	50	42	37	48	41	36	46	40	36	45	39	35	33				
9	59	47	39	34	58	46	38	33	44	38	33	43	37	32	41	36	32	30				
10	55	43	35	31	54	42	35	30	41	34	30	40	34	30	38	33	29	28				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17377	17377	17377
5°	16968	17111	17022
10°	16538	16566	16454
15°	16302	16560	16238
20°	16686	17045	16816
25°	16261	16805	16523
30°	15096	14967	15349
35°	13490	13219	13541
40°	11784	12183	11776
45°	10580	11211	10520
50°	7504	7902	7688
55°	4842	4667	4942
60°	3456	3503	3503
65°	2801	2833	2803
70°	2260	2296	2283
75°	1856	1884	1861
80°	1548	1566	1563
85°	1308	1331	1317



TEST NUMBER: P231408

CATALOG NUMBER: SSLED-LD5-12-W-UNV-L840-CD1-U-FRR22

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	420.4	3.4
10°-20°	1323.9	10.8
20°-30°	2239.7	18.2
30°-40°	2504.4	20.3
40°-50°	2366.9	19.2
50°-60°	1301.1	10.6
60°-70°	728.2	5.9
70°-80°	458.0	3.7
80°-90°	279.1	2.3
90°-100°	186.3	1.5
100°-110°	138.9	1.1
110°-120°	106.3	0.9
120°-130°	82.9	0.7
130°-140°	65.1	0.5
140°-150°	49.8	0.4
150°-160°	34.6	0.3
160°-170°	18.0	0.1
170°-180°	4.6	0.0
0°-30°	3984.0	32.4
0°-40°	6488.4	52.7
0°-60°	10156.4	82.5
0°-90°	11621.6	94.4
90°-120°	431.4	3.5
90°-150°	629.3	5.1
90°-180°	686.0	5.6
0°-180°	12308.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4262	4262	4262	4262	4262	
5°	4398	4405	4434	4406	4412	420
15°	4580	4623	4653	4602	4562	1312
25°	4785	4956	4945	5025	4862	2193
35°	4028	3942	3947	3955	4043	2505
45°	3109	3082	3294	3055	3091	2306
55°	1357	1348	1308	1371	1385	1295
65°	723	725	731	727	723	721
75°	423	426	430	428	424	453
85°	250	250	254	251	252	220
90°	197	199	200	199	198	109
95°	168	169	170	170	169	133
105°	130	130	131	131	131	138
115°	106	106	106	107	107	106
125°	91	92	92	92	92	82
135°	84	84	84	84	84	65
145°	79	79	79	79	80	50
155°	75	75	75	75	75	35
165°	63	63	62	62	62	18
175°	46	46	45	45	46	5
180°	47	47	47	47	47	



TEST NUMBER: P231408

CATALOG NUMBER: SSLED-LD5-12-W-UNV-L840-CD1-U-FRR22

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4261.7	4261.7	4261.7	4261.7	4261.7
2.5°	4286.6	4283.4	4271.9	4261.1	4261.7
5°	4397.5	4405.1	4434.4	4405.7	4411.5
7.5°	4412.7	4430.6	4419.1	4394.9	4360.5
10°	4483.5	4489.8	4491.1	4478.4	4460.5
12.5°	4502.6	4561.2	4528.1	4516.6	4463.1
15°	4580.3	4623.0	4653.0	4602.0	4562.5
17.5°	4709.7	4782.3	4801.4	4779.8	4681.0
20°	4817.4	4918.7	4921.2	4930.8	4855.0
22.5°	4927.6	5023.2	5039.8	5057.6	4951.2
25°	4784.9	4955.7	4944.8	5025.1	4862.0
27.5°	4638.3	4761.3	4728.8	4819.9	4725.6
30°	4491.8	4519.2	4453.5	4546.6	4567.0
32.5°	4259.2	4175.7	4157.2	4212.0	4290.4
35°	4027.9	3942.5	3946.9	3955.2	4043.2
37.5°	3741.8	3829.1	3705.4	3852.6	3750.0
40°	3504.1	3638.5	3622.6	3643.6	3501.5
42.5°	3388.1	3381.7	3613.7	3386.2	3372.2
45°	3109.0	3082.2	3294.4	3054.8	3091.2
47.5°	2654.7	2826.1	2799.9	2827.3	2652.1
50°	2162.1	2329.7	2276.8	2371.1	2215.0
52.5°	1860.7	1778.5	1838.4	1804.0	1868.3
55°	1356.6	1348.4	1307.6	1370.7	1384.7
57.5°	1060.3	1066.1	1070.5	1066.7	1064.2
60°	933.5	946.9	946.3	945.6	946.3
62.5°	820.1	827.7	836.0	830.3	830.9
65°	722.6	725.2	730.9	727.1	723.2
67.5°	628.3	635.9	639.1	639.8	636.6
70°	551.2	556.9	560.1	558.8	556.9
72.5°	485.6	488.7	494.5	492.6	488.7
75°	423.1	426.3	429.5	428.2	424.4
77.5°	370.9	373.4	376.0	376.6	374.0
80°	325.6	328.2	329.4	327.5	328.8
82.5°	284.8	287.4	288.7	288.0	287.4
85°	249.8	250.4	254.3	251.1	251.7
87.5°	219.8	220.5	221.8	221.8	220.5
90°	196.9	198.8	200.1	199.4	198.2
92.5°	181.0	182.9	182.9	182.9	182.2
95°	167.6	168.9	170.1	169.5	168.9
97.5°	156.8	157.4	158.7	158.0	157.4
100°	146.6	147.2	148.5	147.8	147.2
102.5°	137.0	138.3	138.9	138.9	138.3
105°	130.0	130.0	130.6	130.6	130.6
107.5°	123.0	123.0	123.6	123.6	123.6
110°	117.2	117.2	117.2	117.2	117.9



TEST NUMBER: P231408

CATALOG NUMBER: SSLED-LD5-12-W-UNV-L840-CD1-U-FRR22

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	110.9	111.5	111.5	111.5	112.2
115°	105.8	106.4	106.4	107.1	107.1
117.5°	101.3	101.3	102.0	102.0	102.6
120°	97.5	98.1	98.1	98.8	98.8
122.5°	94.3	94.3	94.9	94.9	95.6
125°	91.1	91.8	91.8	92.4	92.4
127.5°	88.6	89.2	89.8	89.8	89.8
130°	87.3	87.9	87.9	87.9	88.6
132.5°	85.4	85.4	85.4	86.0	86.7
135°	83.5	83.5	83.5	83.5	84.1
137.5°	81.6	82.2	82.2	82.2	82.2
140°	80.3	80.9	80.9	80.9	80.9
142.5°	79.7	80.3	80.3	80.3	80.3
145°	79.0	79.0	79.0	79.0	79.7
147.5°	78.4	78.4	78.4	78.4	78.4
150°	77.7	77.7	77.1	77.1	77.7
152.5°	76.5	76.5	75.8	76.5	76.5
155°	74.6	75.2	74.6	74.6	75.2
157.5°	73.3	73.3	73.3	73.3	73.3
160°	70.7	70.7	70.1	70.1	70.7
162.5°	66.9	66.9	66.9	66.9	66.9
165°	63.1	63.1	62.4	62.4	62.4
167.5°	58.6	58.6	58.6	58.6	58.6
170°	52.9	53.5	52.9	52.9	52.9
172.5°	46.5	46.5	46.5	46.5	46.5
175°	45.9	45.9	45.2	45.2	45.9
177.5°	45.9	46.5	46.5	46.5	45.9
180°	47.2	47.2	47.2	47.2	47.2

(END OF REPORT)