

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: P231405

Luminaire Tested: **SSLED-LD5-9-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: P231405
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-LD5-9-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: 9229.0 lumens
Efficiency: N/A
Efficacy: 144.0 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

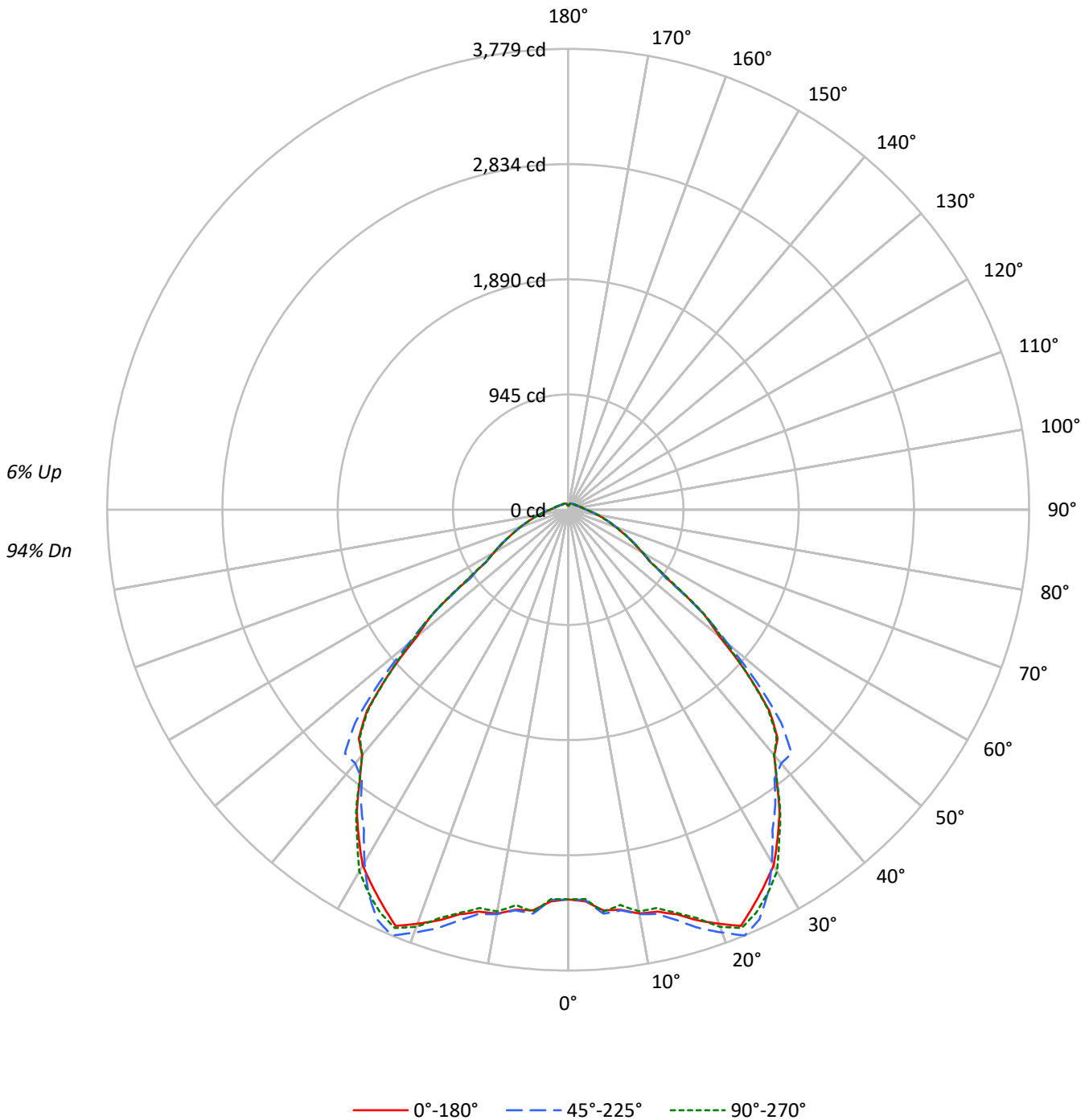
Input Watts (W): 64.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	13030	13030	13030
5°	12724	12830	12764
10°	12401	12422	12338
15°	12224	12418	12176
20°	12512	12781	12609
25°	12193	12601	12390
30°	11319	11223	11509
35°	10115	9912	10153
40°	8836	9135	8830
45°	7933	8407	7888
50°	5627	5925	5765
55°	3631	3499	3706
60°	2591	2627	2627
65°	2100	2124	2102
70°	1694	1722	1712
75°	1392	1412	1396
80°	1161	1174	1172
85°	980	998	988



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	315.2	3.4
10°-20°	992.7	10.8
20°-30°	1679.4	18.2
30°-40°	1877.9	20.3
40°-50°	1774.8	19.2
50°-60°	975.6	10.6
60°-70°	546.0	5.9
70°-80°	343.4	3.7
80°-90°	209.3	2.3
90°-100°	139.7	1.5
100°-110°	104.2	1.1
110°-120°	79.7	0.9
120°-130°	62.2	0.7
130°-140°	48.8	0.5
140°-150°	37.3	0.4
150°-160°	25.9	0.3
160°-170°	13.5	0.1
170°-180°	3.4	0.0
0°-30°	2987.4	32.4
0°-40°	4865.2	52.7
0°-60°	7615.6	82.5
0°-90°	8714.3	94.4
90°-120°	323.5	3.5
90°-150°	471.8	5.1
90°-180°	515.0	5.6
0°-180°	9229.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3196	3196	3196	3196	3196	
5°	3297	3303	3325	3304	3308	315
15°	3434	3466	3489	3451	3421	984
25°	3588	3716	3708	3768	3646	1645
35°	3020	2956	2960	2966	3032	1878
45°	2331	2311	2470	2291	2318	1729
55°	1017	1011	980	1028	1038	971
65°	542	544	548	545	542	540
75°	317	320	322	321	318	340
85°	187	188	191	188	189	165
90°	148	149	150	150	149	82
95°	126	127	128	127	127	100
105°	98	98	98	98	98	104
115°	79	80	80	80	80	79
125°	68	69	69	69	69	62
135°	63	63	63	63	63	49
145°	59	59	59	59	60	37
155°	56	56	56	56	56	26
165°	47	47	47	47	47	13
175°	34	34	34	34	34	3
180°	35	35	35	35	35	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3195.6	3195.6	3195.6	3195.6	3195.6
2.5°	3214.2	3211.8	3203.2	3195.1	3195.6
5°	3297.4	3303.1	3325.1	3303.6	3307.9
7.5°	3308.8	3322.2	3313.6	3295.5	3269.7
10°	3361.9	3366.7	3367.6	3358.1	3344.7
12.5°	3376.2	3420.2	3395.3	3386.7	3346.6
15°	3434.5	3466.5	3489.0	3450.8	3421.1
17.5°	3531.5	3586.0	3600.3	3584.1	3510.0
20°	3612.3	3688.2	3690.1	3697.3	3640.4
22.5°	3694.9	3766.6	3779.0	3792.4	3712.6
25°	3587.9	3715.9	3707.8	3768.0	3645.7
27.5°	3478.0	3570.2	3545.8	3614.2	3543.4
30°	3368.1	3388.6	3339.4	3409.2	3424.5
32.5°	3193.7	3131.1	3117.2	3158.3	3217.1
35°	3020.2	2956.2	2959.6	2965.8	3031.7
37.5°	2805.7	2871.2	2778.5	2888.8	2811.9
40°	2627.5	2728.3	2716.4	2732.1	2625.6
42.5°	2540.5	2535.7	2709.7	2539.1	2528.6
45°	2331.2	2311.2	2470.3	2290.6	2317.9
47.5°	1990.6	2119.1	2099.5	2120.0	1988.6
50°	1621.2	1746.9	1707.2	1777.9	1660.9
52.5°	1395.2	1333.6	1378.5	1352.7	1400.9
55°	1017.3	1011.0	980.5	1027.8	1038.3
57.5°	795.1	799.4	802.7	799.9	797.9
60°	700.0	710.0	709.5	709.1	709.5
62.5°	614.9	620.7	626.9	622.6	623.1
65°	541.8	543.7	548.0	545.2	542.3
67.5°	471.1	476.9	479.2	479.7	477.3
70°	413.3	417.6	420.0	419.0	417.6
72.5°	364.1	366.5	370.8	369.3	366.5
75°	317.3	319.7	322.0	321.1	318.2
77.5°	278.1	280.0	281.9	282.4	280.5
80°	244.2	246.1	247.0	245.6	246.6
82.5°	213.6	215.5	216.4	216.0	215.5
85°	187.3	187.8	190.6	188.3	188.7
87.5°	164.8	165.3	166.3	166.3	165.3
90°	147.6	149.1	150.0	149.6	148.6
92.5°	135.7	137.1	137.1	137.1	136.7
95°	125.7	126.6	127.6	127.1	126.6
97.5°	117.5	118.0	119.0	118.5	118.0
100°	109.9	110.4	111.3	110.9	110.4
102.5°	102.7	103.7	104.2	104.2	103.7
105°	97.5	97.5	98.0	98.0	98.0
107.5°	92.2	92.2	92.7	92.7	92.7
110°	87.9	87.9	87.9	87.9	88.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	83.1	83.6	83.6	83.6	84.1
115°	79.3	79.8	79.8	80.3	80.3
117.5°	76.0	76.0	76.4	76.4	76.9
120°	73.1	73.6	73.6	74.1	74.1
122.5°	70.7	70.7	71.2	71.2	71.7
125°	68.3	68.8	68.8	69.3	69.3
127.5°	66.4	66.9	67.4	67.4	67.4
130°	65.5	65.9	65.9	65.9	66.4
132.5°	64.0	64.0	64.0	64.5	65.0
135°	62.6	62.6	62.6	62.6	63.1
137.5°	61.2	61.6	61.6	61.6	61.6
140°	60.2	60.7	60.7	60.7	60.7
142.5°	59.7	60.2	60.2	60.2	60.2
145°	59.2	59.2	59.2	59.2	59.7
147.5°	58.8	58.8	58.8	58.8	58.8
150°	58.3	58.3	57.8	57.8	58.3
152.5°	57.3	57.3	56.9	57.3	57.3
155°	55.9	56.4	55.9	55.9	56.4
157.5°	54.9	54.9	54.9	54.9	54.9
160°	53.0	53.0	52.6	52.6	53.0
162.5°	50.2	50.2	50.2	50.2	50.2
165°	47.3	47.3	46.8	46.8	46.8
167.5°	44.0	44.0	44.0	44.0	44.0
170°	39.7	40.1	39.7	39.7	39.7
172.5°	34.9	34.9	34.9	34.9	34.9
175°	34.4	34.4	33.9	33.9	34.4
177.5°	34.4	34.9	34.9	34.9	34.4
180°	35.4	35.4	35.4	35.4	35.4

(END OF REPORT)