

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: P284750

Luminaire Tested: **4SNLED-LD5-69HL-SLW-UNV-L950-CD1-U**

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: P284750
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P#)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-69HL-SLW-UNV-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
SQUARE FROSTED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6289.0 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.56 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

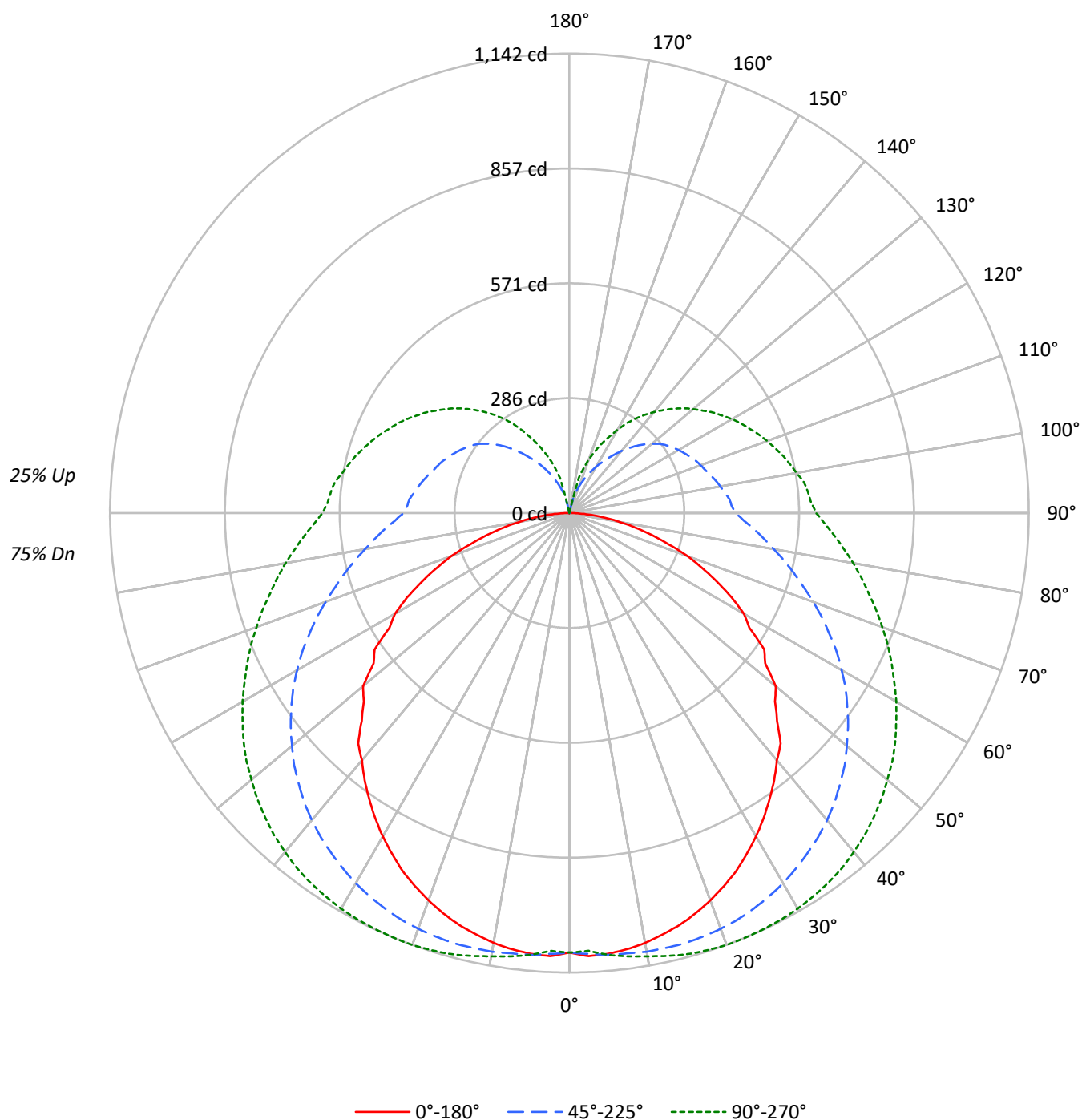
Input Watts (W): 62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	113	113	113	113	107	107	107	107	97	97	97	88	88	88	79	79	79	75		
1	100	94	89	84	95	89	84	80	80	76	73	72	69	66	64	62	60	56		
2	90	80	72	66	85	76	69	63	68	63	58	61	57	53	55	51	48	44		
3	81	69	60	53	76	66	58	51	59	53	47	53	48	43	47	43	39	36		
4	74	61	51	44	69	58	49	43	52	45	39	47	41	36	42	37	33	30		
5	67	54	44	37	63	51	43	36	46	39	33	42	35	31	37	32	28	25		
6	62	48	39	32	58	46	37	31	41	34	29	37	31	27	34	28	24	22		
7	57	43	34	28	54	41	33	27	37	30	25	34	28	23	30	25	21	19		
8	53	39	31	25	50	37	29	24	34	27	22	31	25	21	28	23	19	17		
9	49	36	27	22	47	34	26	21	31	24	20	28	23	18	26	21	17	15		
10	46	33	25	20	44	31	24	19	29	22	18	26	21	16	24	19	15	13		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8827	8827	8827
5°	8895	8722	8657
10°	8852	8645	8609
15°	8791	8599	8628
20°	8708	8560	8644
25°	8625	8528	8657
30°	8506	8502	8704
35°	8374	8472	8763
40°	8248	8466	8820
45°	8092	8446	8890
50°	8116	8428	8961
55°	7971	8428	9067
60°	7680	8433	9190
65°	7254	8443	9362
70°	6787	8506	9625
75°	5956	8702	10015
80°	5028	9121	10658
85°	3730	9972	11602



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.0	1.7
10°-20°	311.1	4.9
20°-30°	494.5	7.9
30°-40°	634.6	10.1
40°-50°	716.6	11.4
50°-60°	731.2	11.6
60°-70°	677.4	10.8
70°-80°	573.5	9.1
80°-90°	457.8	7.3
90°-100°	388.8	6.2
100°-110°	346.4	5.5
110°-120°	295.0	4.7
120°-130°	234.3	3.7
130°-140°	166.2	2.6
140°-150°	99.2	1.6
150°-160°	46.3	0.7
160°-170°	11.0	0.2
170°-180°	0.0	0.0
0°-30°	910.5	14.5
0°-40°	1545.2	24.6
0°-60°	2993.0	47.6
0°-90°	4701.8	74.8
90°-120°	1030.1	16.4
90°-150°	1529.9	24.3
90°-180°	1587.0	25.2
0°-180°	6289.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1092	1092	1092	1092	1092	
5°	1100	1091	1102	1102	1102	104
15°	1060	1068	1107	1127	1135	299
25°	981	1014	1085	1123	1141	452
35°	867	931	1032	1095	1122	543
45°	730	829	952	1034	1070	567
55°	591	690	844	947	989	519
65°	405	540	714	836	884	402
75°	213	377	578	720	770	227
85°	55	242	461	610	662	60
90°	3	198	412	562	613	4
95°	0	186	399	545	595	0
105°	0	172	364	501	550	0
115°	0	160	331	451	495	0
125°	0	138	294	398	436	0
135°	0	102	236	335	366	0
145°	0	67	166	251	287	1
155°	2	42	102	154	191	1
165°	2	22	46	63	90	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1092.3	1092.3	1092.3	1092.3	1092.3
2.5°	1102.3	1090.7	1096.7	1095.1	1089.1
5°	1099.5	1090.7	1102.3	1102.3	1102.3
7.5°	1093.5	1087.5	1103.8	1109.8	1111.4
10°	1084.7	1084.7	1107.0	1115.8	1118.6
12.5°	1072.7	1077.1	1107.0	1120.2	1127.4
15°	1059.6	1068.4	1107.0	1127.4	1135.0
17.5°	1043.2	1058.0	1103.8	1129.0	1139.3
20°	1024.1	1046.4	1099.5	1129.0	1142.5
22.5°	1003.4	1031.7	1093.5	1126.2	1142.5
25°	981.4	1013.7	1084.7	1123.0	1140.9
27.5°	954.7	996.2	1074.3	1118.6	1139.3
30°	928.0	975.4	1062.4	1112.6	1135.0
32.5°	898.5	953.1	1047.6	1103.8	1129.0
35°	867.4	931.2	1031.7	1095.1	1121.8
37.5°	836.3	904.5	1015.3	1083.1	1112.6
40°	802.4	877.7	996.2	1068.4	1099.5
42.5°	777.2	849.8	975.4	1053.6	1086.3
45°	730.2	829.1	951.5	1034.5	1069.9
47.5°	693.1	789.2	928.0	1015.3	1052.0
50°	669.6	756.5	900.1	993.0	1031.7
52.5°	613.3	734.6	873.3	971.0	1012.1
55°	591.0	690.3	843.8	947.1	988.6
57.5°	530.4	659.2	814.3	920.8	963.5
60°	500.9	616.1	781.6	894.1	938.3
62.5°	455.0	579.4	749.3	864.6	910.4
65°	404.8	539.6	713.8	836.3	883.7
67.5°	357.7	499.7	679.9	806.7	857.0
70°	311.9	458.2	644.4	777.2	827.5
72.5°	258.4	416.7	610.1	749.3	799.6
75°	213.0	376.9	577.8	719.8	770.1
77.5°	168.3	338.6	546.7	693.1	743.3
80°	127.2	301.5	515.6	665.2	716.6
82.5°	88.5	270.4	487.7	638.5	688.7
85°	54.6	242.5	461.0	610.1	662.0
87.5°	25.1	217.3	434.3	583.8	636.9
90°	2.8	198.2	412.3	561.5	613.3
92.5°	1.6	192.2	403.6	551.1	601.4
95°	0.0	186.2	399.2	545.1	595.4
97.5°	0.0	180.3	388.8	536.4	588.2
100°	0.0	177.5	381.2	523.2	573.5
102.5°	0.0	173.1	372.5	511.2	561.5
105°	0.0	171.5	363.7	500.9	549.9
107.5°	0.0	168.3	354.5	487.7	536.4
110°	0.0	165.5	347.3	475.8	523.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	162.7	339.8	464.2	509.7
115°	0.0	159.5	331.0	450.6	494.9
117.5°	0.0	155.1	322.2	437.5	481.7
120°	0.0	149.1	313.4	425.5	467.0
122.5°	0.0	143.2	304.3	410.8	450.6
125°	0.0	137.6	293.9	397.6	435.9
127.5°	0.0	128.4	282.3	382.8	418.3
130°	0.0	119.6	267.6	368.1	402.0
132.5°	1.6	110.9	252.8	351.7	385.6
135°	0.0	102.1	236.5	335.4	366.5
137.5°	0.0	94.5	218.5	317.8	347.3
140°	0.0	85.7	201.0	297.1	328.2
142.5°	0.0	75.4	183.4	274.8	307.5
145°	0.0	66.6	165.5	251.2	286.7
147.5°	1.6	59.0	149.1	226.1	264.4
150°	1.6	53.0	133.2	201.0	239.3
152.5°	1.6	47.5	116.8	177.5	214.1
155°	1.6	41.5	102.1	153.5	190.6
157.5°	1.6	35.5	85.7	130.0	165.5
160°	1.6	31.1	71.0	109.3	142.0
162.5°	1.6	26.7	57.8	85.7	116.8
165°	1.6	22.3	45.9	63.4	90.1
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)