

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: NEO-RAY

Report Number: P199560

Luminaire Tested: **S125-DIP-ULO-1-40-X-X0048-1D-UDD-1-NA-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199560  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P27900 P27899)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125-DIP-ULO-1-40-X-X0048-1D-UDD-1-NA-W  
Description: DEFINE 5-INCH DIRECT/INDIRECT PENDANT LED LUMINAIRE  
UPLIGHT LLO-4000K, NO LENS  
DOWNLIGHT LL1-4000K, SATIN WHITE DIFFUSER  
Light Source: -  
757G  
Ballast/Driver: ELECTRONIC DRIVERS

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4801.7 lumens  
Efficiency: N/A  
Efficacy: 119.7 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.16 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4.08' x H: 0.38')  
CIE Type: Semi-Direct

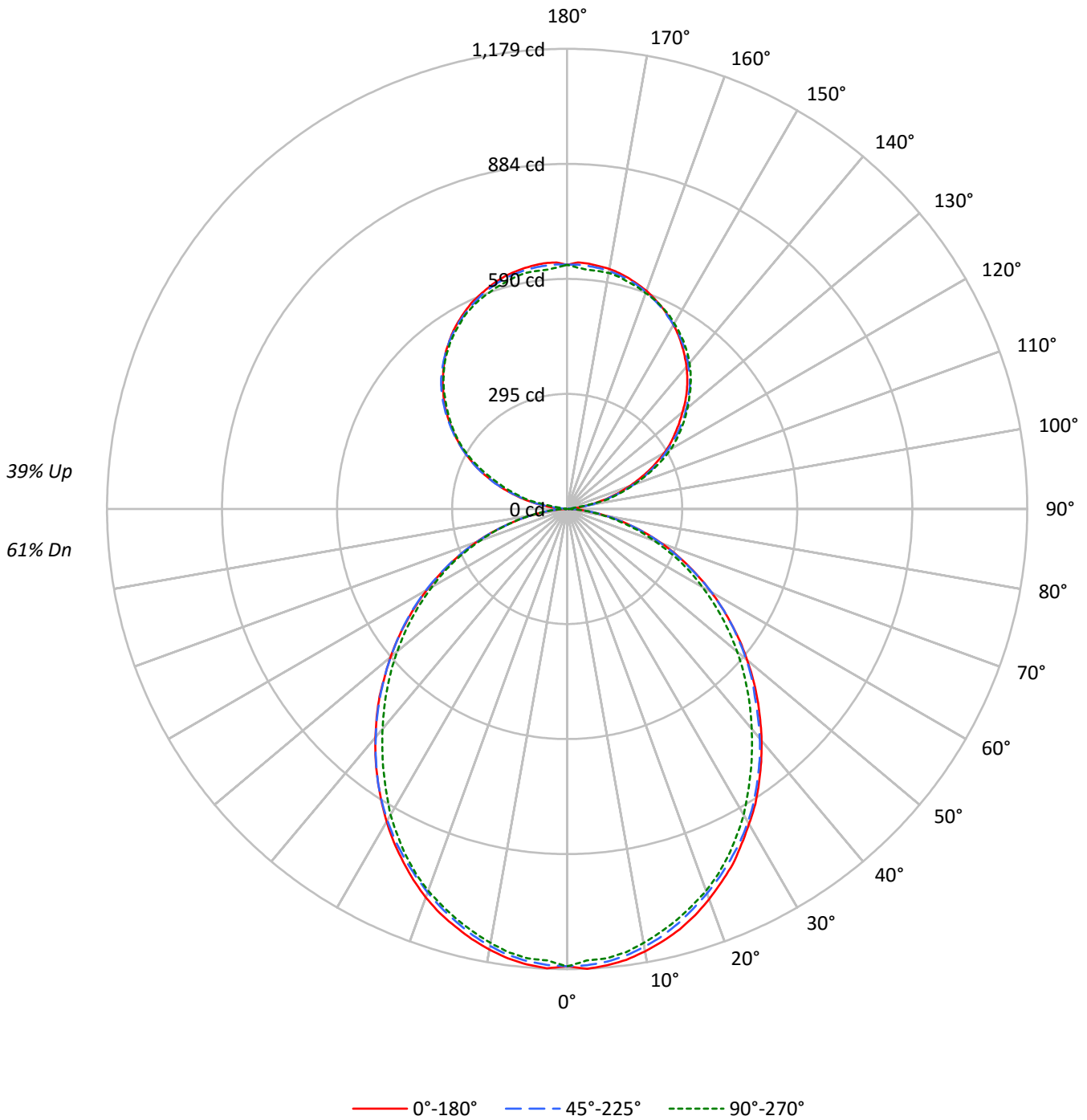
Input Watts (W): 40.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66	61
1	100	96	92	89	94	90	87	83	79	76	74	68	66	65	59	57	56	52
2	91	84	78	72	85	79	73	69	69	65	61	60	57	54	52	49	47	43
3	83	74	66	60	78	69	63	57	61	56	52	53	49	46	46	43	40	37
4	76	65	57	51	71	62	54	49	54	49	44	47	43	39	41	38	35	32
5	70	58	50	44	65	55	48	42	49	43	38	43	38	34	37	33	30	27
6	65	52	44	38	60	50	42	37	44	38	33	39	34	30	34	30	27	24
7	60	47	39	34	56	45	37	32	40	34	29	35	30	27	31	27	24	21
8	56	43	35	30	52	41	34	29	36	30	26	32	27	24	28	24	21	19
9	52	40	32	27	49	37	30	26	33	28	24	30	25	21	26	22	19	17
10	49	36	29	24	45	34	28	23	31	25	21	27	23	19	24	20	18	16

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	7412	7412	7412
5°	7394	6804	7381
10°	7275	6261	7248
15°	7127	5747	7081
20°	6932	5280	6899
25°	6724	4812	6666
30°	6466	4350	6416
35°	6217	3886	6145
40°	5943	3461	5860
45°	5652	3073	5570
50°	5343	2700	5241
55°	5013	2336	4894
60°	4657	1978	4531
65°	4269	1634	4116
70°	3812	1268	3632
75°	3199	901	2976
80°	2422	560	2216
85°	1448	244	1268



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.2	2.3
10°-20°	309.3	6.4
20°-30°	454.4	9.5
30°-40°	524.8	10.9
40°-50°	520.2	10.8
50°-60°	451.2	9.4
60°-70°	329.5	6.9
70°-80°	180.1	3.7
80°-90°	46.8	1.0
90°-100°	20.0	0.4
100°-110°	132.9	2.8
110°-120°	243.8	5.1
120°-130°	316.0	6.6
130°-140°	343.3	7.2
140°-150°	324.5	6.8
150°-160°	264.0	5.5
160°-170°	171.7	3.6
170°-180°	59.4	1.2
0°-30°	873.8	18.2
0°-40°	1398.5	29.1
0°-60°	2369.8	49.4
0°-90°	2926.2	60.9
90°-120°	396.6	8.3
90°-150°	1380.5	28.7
90°-180°	1876.0	39.1
0°-180°	4801.7	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1172	1172	1172	1172	1172	
5°	1174	1164	1156	1163	1172	111
15°	1115	1099	1089	1096	1108	314
25°	1004	991	979	987	996	462
35°	857	850	820	847	847	536
45°	690	680	652	677	680	532
55°	514	513	484	504	502	460
65°	341	338	320	330	329	338
75°	176	174	161	164	164	187
85°	41	43	38	38	36	46
90°	1	3	1	2	1	3
95°	13	4	4	6	31	20
105°	109	116	124	137	140	116
115°	230	239	246	258	257	226
125°	338	348	356	363	361	302
135°	434	444	448	457	451	334
145°	512	517	522	526	526	321
155°	572	570	572	577	582	264
165°	612	608	602	612	617	173
175°	631	625	615	626	633	60
180°	626	626	626	626	626	



TEST NUMBER: P199560

CATALOG NUMBER: S125-DIP-ULO-1-40-X-X0048-1D-UDD-1-NA-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1171.6	1171.6	1171.6	1171.6	1171.6	1171.6	1171.6	1171.6	1171.6
2.5°	1179.4	1167.3	1170.1	1168.0	1157.9	1166.5	1169.4	1165.1	1178.0
5°	1173.7	1161.5	1164.4	1161.5	1155.8	1160.1	1163.0	1158.6	1171.6
7.5°	1165.1	1152.2	1154.3	1151.5	1145.7	1149.3	1152.9	1148.6	1161.5
10°	1150.8	1138.6	1139.3	1135.7	1129.3	1133.6	1137.1	1133.6	1146.5
12.5°	1134.3	1121.4	1121.4	1115.6	1109.9	1113.5	1118.5	1115.6	1128.5
15°	1114.9	1101.3	1099.1	1095.6	1089.1	1093.4	1095.6	1094.8	1107.7
17.5°	1091.3	1076.9	1074.0	1073.3	1065.4	1071.2	1071.9	1069.7	1085.5
20°	1064.0	1050.4	1048.2	1047.5	1041.1	1045.4	1045.4	1042.5	1059.0
22.5°	1033.9	1021.0	1020.3	1018.8	1011.7	1016.7	1016.7	1012.4	1028.9
25°	1004.5	988.7	990.9	987.3	978.7	985.9	986.6	979.4	995.9
27.5°	967.9	955.7	960.0	953.6	942.1	951.4	955.7	945.0	962.2
30°	932.1	919.2	926.3	914.9	904.8	913.4	921.3	907.7	924.9
32.5°	896.9	881.9	890.5	876.2	861.8	872.6	885.5	872.6	886.2
35°	856.8	844.6	849.6	834.6	820.2	831.0	846.8	834.6	846.8
37.5°	816.6	806.6	810.2	792.3	777.9	788.7	805.2	795.9	806.6
40°	775.1	767.9	767.9	750.0	735.6	745.7	762.9	757.9	764.3
42.5°	732.0	729.2	723.4	707.7	694.0	704.1	720.6	719.1	722.0
45°	689.7	689.7	680.4	663.9	652.5	661.8	676.8	680.4	679.7
47.5°	646.0	649.6	641.7	623.8	610.9	620.2	633.8	640.3	633.1
50°	602.3	608.7	598.7	582.9	568.6	578.6	590.1	598.7	590.8
52.5°	558.5	566.4	555.7	540.6	526.3	535.6	547.1	557.1	547.1
55°	514.1	523.4	513.4	497.6	484.0	492.6	504.0	514.1	501.9
57.5°	470.3	478.9	470.3	454.6	441.7	449.5	461.7	469.6	458.9
60°	426.6	435.9	427.3	412.3	400.1	406.5	418.0	425.9	415.1
62.5°	383.6	391.5	382.2	370.0	360.6	363.5	374.3	383.6	372.1
65°	341.3	348.5	338.4	327.7	319.8	321.2	330.5	335.5	329.1
67.5°	299.7	307.6	296.8	286.8	277.5	280.3	288.2	295.4	287.5
70°	258.1	266.0	254.5	245.9	238.0	239.5	245.9	253.8	245.9
72.5°	217.2	223.7	215.8	205.8	200.0	201.5	205.1	212.2	204.3
75°	175.7	182.8	174.2	166.3	160.6	162.0	164.2	169.9	163.5
77.5°	136.9	142.0	136.2	129.8	126.2	126.9	127.6	131.9	126.2
80°	101.1	105.4	101.8	96.8	93.9	93.9	93.9	97.5	92.5
82.5°	68.8	73.1	70.3	66.7	64.5	62.4	63.8	66.7	62.4
85°	40.9	44.5	43.0	39.4	38.0	36.6	38.0	39.4	35.8
87.5°	18.6	21.5	19.4	15.8	14.3	12.9	12.9	15.1	12.2
90°	1.4	3.6	2.9	2.2	1.4	1.4	2.2	2.9	1.4
92.5°	1.8	2.6	2.6	2.9	2.9	3.3	3.7	4.4	12.5
95°	13.3	14.7	4.1	4.4	4.4	4.8	6.3	35.7	30.6
97.5°	30.6	39.1	12.9	7.7	7.0	10.3	39.8	56.7	53.8
100°	54.5	60.8	61.5	40.2	27.3	56.4	78.5	84.7	80.7
102.5°	80.7	87.7	85.8	93.2	95.8	103.9	105.7	113.8	110.5
105°	109.1	116.8	115.7	123.1	123.8	133.0	136.7	141.5	139.6
107.5°	138.9	144.4	147.4	152.2	151.8	161.7	169.1	171.3	169.5
110°	169.5	173.2	178.7	182.0	182.0	191.9	200.4	200.8	198.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	198.6	204.8	210.0	214.1	213.3	224.0	229.9	231.0	228.8
115°	229.5	232.1	239.1	245.0	246.1	254.2	258.3	259.4	257.2
117.5°	257.9	261.9	266.4	273.4	277.1	282.2	285.2	287.0	284.8
120°	288.1	290.7	293.3	299.9	306.5	309.5	311.7	313.2	311.3
122.5°	314.3	316.1	321.6	326.1	332.7	334.9	338.2	337.8	336.4
125°	337.5	340.1	348.2	350.7	356.3	359.2	363.3	361.1	361.1
127.5°	361.8	364.0	374.3	374.7	379.8	383.2	388.3	384.6	385.0
130°	385.7	389.4	398.6	398.6	402.7	406.4	412.3	406.7	408.2
132.5°	411.2	412.3	420.7	421.1	424.8	428.5	435.5	428.1	429.6
135°	434.4	433.3	444.3	442.5	447.6	449.8	456.8	448.0	450.6
137.5°	455.4	452.8	464.6	462.7	468.3	468.6	476.0	467.5	470.5
140°	476.0	473.1	483.0	481.9	488.2	487.4	492.9	485.9	490.0
142.5°	494.4	491.1	500.7	500.3	505.1	505.1	509.9	504.0	509.9
145°	512.5	508.1	516.9	516.5	521.7	521.3	525.7	520.2	525.7
147.5°	529.4	525.0	532.0	531.3	535.7	536.1	539.7	536.4	542.3
150°	544.9	540.8	545.3	544.9	548.9	549.3	553.0	551.5	555.9
152.5°	558.9	555.2	557.4	556.7	562.6	560.4	564.8	564.1	568.8
155°	571.8	568.1	569.9	568.5	572.5	572.2	576.9	576.2	581.7
157.5°	583.6	579.5	581.0	578.8	581.7	581.7	587.3	587.3	591.3
160°	595.0	589.5	591.3	587.6	588.7	590.2	596.8	596.8	600.5
162.5°	603.1	599.4	600.5	595.4	596.5	597.2	604.9	604.9	609.4
165°	611.9	607.2	608.3	602.0	602.4	604.2	611.9	612.3	617.1
167.5°	618.9	614.2	613.8	607.5	609.4	609.7	617.1	617.5	622.6
170°	624.5	619.3	619.3	612.7	614.2	613.4	621.2	622.3	626.7
172.5°	627.4	623.7	622.6	615.3	614.9	616.0	624.1	625.6	630.0
175°	631.1	626.7	624.8	617.8	614.9	618.6	625.9	627.4	632.6
177.5°	632.2	627.8	626.3	618.9	618.9	619.7	627.1	628.2	632.2
180°	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6

(END OF REPORT)