

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: P199559

Luminaire Tested: **S125-DIP-ULO-1-40-X-X0048-1D-UDD-1-5-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199559  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P27900 P27900)  
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-1-5-W  
Description: DEFINE 5-INCH DIRECT/INDIRECT PENDANT LED LUMINAIRE  
UPLIGHT LLO-4000K, SATIN WHITE DIFFUSER  
DOWNLIGHT LL1-4000K, SATIN WHITE DIFFUSER  
Light Source: -  
757G  
Ballast/Driver: ELECTRONIC DRIVERS

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4514.2 lumens  
Efficiency: N/A  
Efficacy: 112.6 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

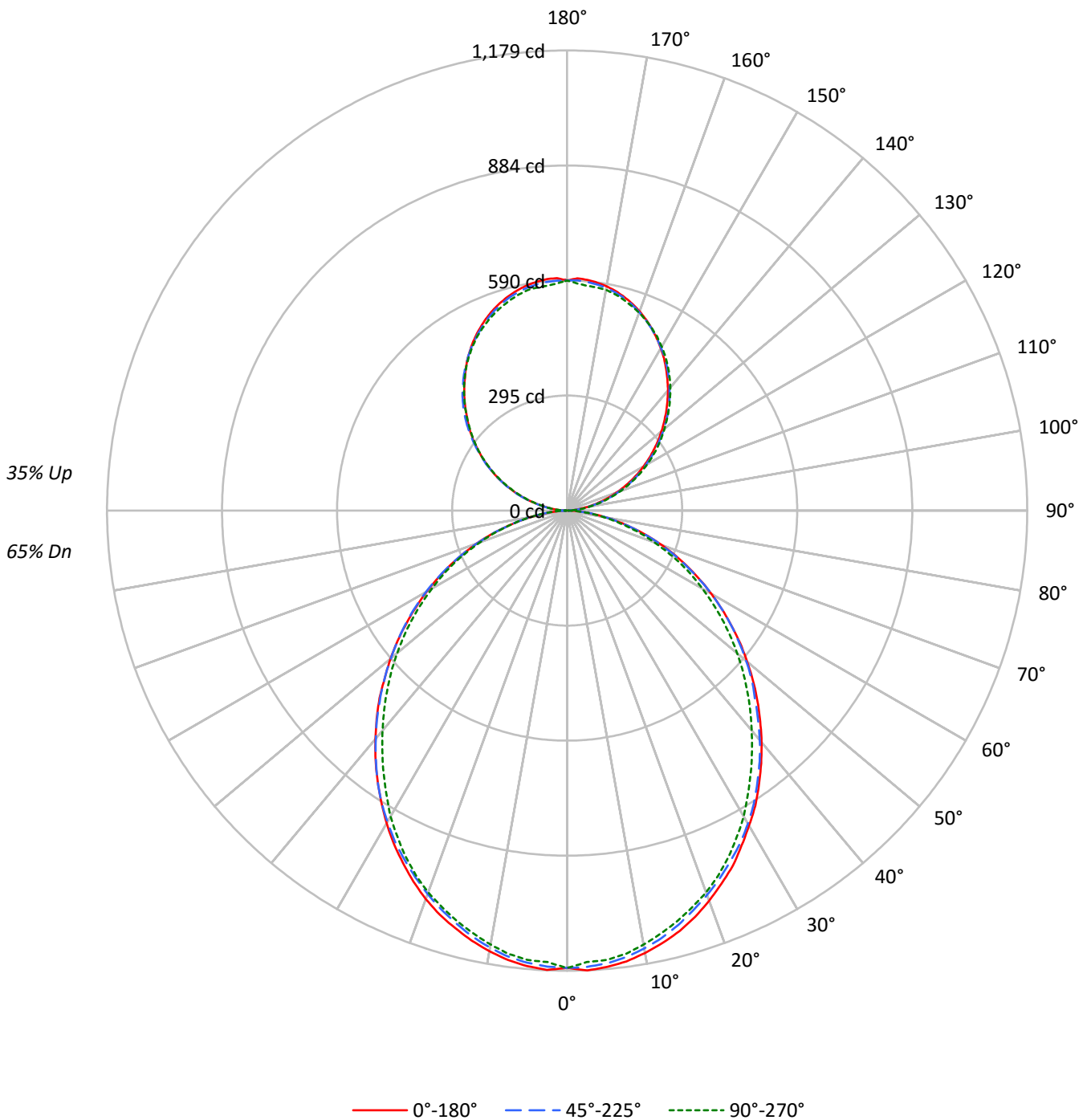
Input Watts (W): 40.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	111	111	111	104	104	104	104	92	92	92	80	80	80	70	70	70	65
1	101	97	93	89	95	91	88	85	81	78	76	71	69	67	62	60	59	55
2	92	85	78	73	86	80	74	70	71	66	63	62	59	56	55	52	50	46
3	84	75	67	61	79	70	64	58	62	57	53	55	51	48	48	45	43	39
4	77	66	58	52	72	62	55	50	56	50	45	49	45	41	43	40	37	34
5	71	59	51	45	66	56	48	43	50	44	39	44	39	36	39	35	32	29
6	65	53	45	39	61	50	43	37	45	39	34	40	35	31	35	31	28	26
7	61	48	40	34	57	46	38	33	41	35	30	37	31	28	32	28	25	23
8	56	44	36	30	53	42	34	29	37	31	27	33	28	25	30	26	23	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	28	23	20	18
10	49	37	29	24	46	35	28	24	32	26	22	29	24	20	26	22	19	17

**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	2.4
10°-20°	309.3	6.9
20°-30°	454.4	10.1
30°-40°	524.8	11.6
40°-50°	520.2	11.5
50°-60°	451.2	10.0
60°-70°	329.5	7.3
70°-80°	180.1	4.0
80°-90°	46.8	1.0
90°-100°	29.4	0.7
100°-110°	105.6	2.3
110°-120°	187.8	4.2
120°-130°	250.5	5.5
130°-140°	283.4	6.3
140°-150°	279.9	6.2
150°-160°	237.0	5.3
160°-170°	158.7	3.5
170°-180°	55.7	1.2
0°-30°	873.8	19.4
0°-40°	1398.5	31.0
0°-60°	2369.8	52.5
0°-90°	2926.2	64.8
90°-120°	322.8	7.2
90°-150°	1136.5	25.2
90°-180°	1588.0	35.2
0°-180°	4514.2	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	4
95°	20	24	26	28	26	23
105°	90	96	100	104	102	96
115°	180	188	190	194	193	178
125°	271	277	282	286	283	242
135°	359	368	369	376	368	277
145°	442	447	450	453	452	277
155°	514	513	515	518	521	237
165°	566	564	559	566	571	160
175°	594	588	578	588	595	56
180°	590	590	590	590	590	



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**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°	7.0	9.6	9.6	8.5	10.3	11.8	14.4	14.4	12.5
95°	20.3	22.8	23.9	24.7	26.5	27.3	28.0	28.0	25.8
97.5°	34.6	38.3	39.1	40.2	42.4	42.7	43.8	44.2	41.6
100°	50.8	55.3	56.0	57.5	60.1	60.4	61.9	62.6	60.1
102.5°	69.3	74.4	75.5	76.6	78.5	79.9	81.8	82.9	79.9
105°	89.5	95.8	96.5	98.0	100.2	101.7	103.9	104.6	102.1
107.5°	112.0	116.8	119.0	119.7	121.9	123.4	126.4	126.7	124.5
110°	134.1	138.5	141.5	142.2	144.4	145.9	148.8	148.8	147.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	156.9	161.7	164.3	165.1	167.6	168.7	171.7	172.1	170.2
115°	180.2	184.6	187.5	188.3	190.5	191.9	194.5	195.3	193.4
117.5°	203.4	207.8	210.0	211.5	214.1	215.2	216.6	217.7	215.9
120°	225.8	230.3	232.1	234.3	236.9	238.0	240.2	239.5	238.4
122.5°	248.7	252.7	254.6	257.2	260.1	260.5	261.9	261.6	260.8
125°	270.8	274.1	277.4	278.9	282.2	282.2	286.3	282.9	282.9
127.5°	293.3	295.8	300.3	301.0	303.9	304.3	309.1	304.3	305.4
130°	315.4	317.2	323.1	323.1	325.3	326.1	332.3	325.7	327.2
132.5°	337.1	338.6	345.6	344.8	347.1	347.8	354.8	347.1	346.7
135°	358.8	359.6	367.7	366.6	368.8	369.9	376.2	367.7	368.1
137.5°	380.2	379.8	388.3	387.9	390.2	390.9	396.8	386.8	389.4
140°	401.9	399.4	408.2	408.9	411.2	411.9	415.9	408.2	410.4
142.5°	421.8	420.7	427.4	428.5	431.4	431.4	435.1	427.4	430.3
145°	442.1	439.5	446.9	446.9	450.2	449.8	452.8	447.6	451.7
147.5°	462.0	458.7	464.9	465.3	468.3	468.3	470.8	465.7	470.8
150°	480.1	477.1	481.5	481.9	484.8	484.5	487.1	484.5	488.9
152.5°	497.4	494.4	497.4	497.0	500.7	499.6	502.9	500.7	505.8
155°	513.9	510.6	513.2	511.7	514.7	514.3	518.0	517.3	521.3
157.5°	529.1	525.4	527.6	525.7	527.6	527.9	532.0	531.6	536.1
160°	543.1	539.4	540.8	537.5	539.4	539.7	544.9	544.9	549.3
162.5°	555.6	551.5	553.0	547.8	549.7	549.7	556.3	556.3	560.7
165°	566.3	562.6	563.7	557.4	559.3	559.6	566.3	566.6	570.7
167.5°	575.8	571.8	572.2	566.3	567.7	568.1	574.0	574.7	579.5
170°	583.2	579.5	579.5	572.9	574.0	574.4	580.6	581.7	586.5
172.5°	589.1	585.1	584.3	577.3	576.6	578.4	584.7	586.9	591.3
175°	593.5	589.1	588.0	581.0	578.4	582.1	588.4	590.2	595.4
177.5°	595.4	590.9	590.2	582.8	582.5	583.6	589.5	591.7	596.1
180°	589.5	589.5	589.5	589.5	589.5	589.5	589.5	589.5	589.5

(END OF REPORT)