

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: P199522

Luminaire Tested: **S125-DIW-U1-1-35-0048-1D-UDD-1-NA-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199522  
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-DIW-U1-1-35-0048-1D-UDD-1-NA-W  
Description: DEFINE 5-INCH DIRECT/INDIRECT WALL LED LUMINAIRE  
UPLIGHT LL1-3500K, NO LENS  
DOWNLIGHT LL1-3500K, SATIN WHITE DIFFUSER  
Light Source: -  
757G  
Ballast/Driver: ELECTRONIC DRIVERS

**Summary**

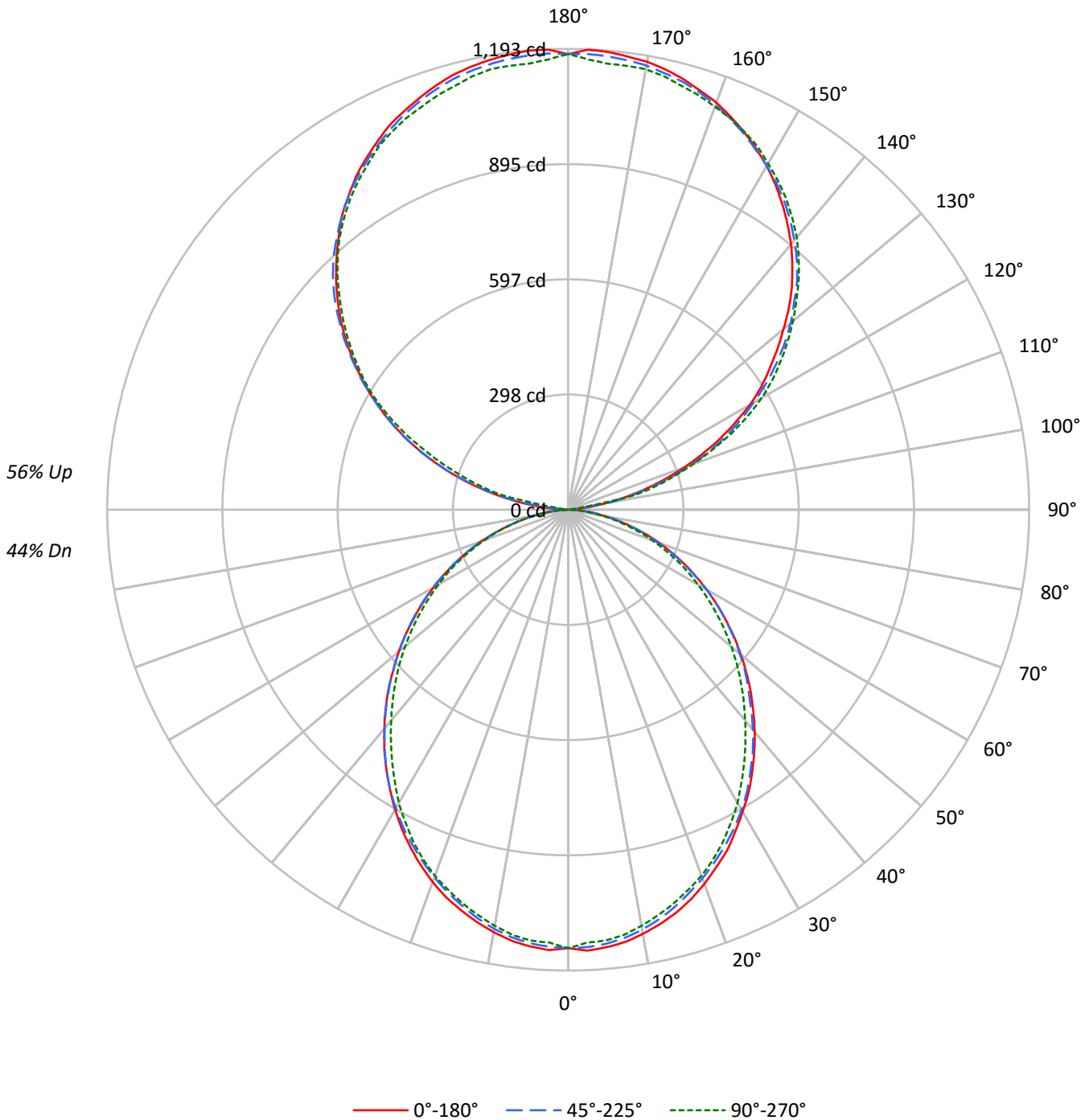
Lumens per Lamp: N/A  
Luminaire Lumens: 6370.3 lumens  
Efficiency: N/A  
Efficacy: 122.5 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.16 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4.08' x H: 0.38')  
CIE Type: General Diffuse

Input Watts (W): 52  
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

TEST NUMBER: P199522

CATALOG NUMBER: S125-DIW-U1-1-35-0048-1D-UDD-1-NA-W

### Luminous Intensity Polar Plot





TEST NUMBER: P199522

CATALOG NUMBER: S125-DIW-U1-1-35-0048-1D-UDD-1-NA-W

**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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	97	92	89	85	88	85	81	79	70	68	66	57	56	54	45	44	43	38
2	88	81	75	70	80	74	69	64	62	58	55	50	48	45	40	38	36	32
3	80	71	64	58	73	65	59	54	55	50	46	45	41	38	35	33	31	27
4	73	63	55	49	67	58	51	46	48	43	39	40	36	33	32	29	27	23
5	67	56	48	42	62	52	45	39	43	38	34	36	32	29	29	26	23	20
6	62	50	42	36	57	46	39	34	39	34	30	32	28	25	26	23	21	18
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	24	21	18	16
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	16	14
9	50	37	30	25	45	35	28	24	30	24	21	25	21	18	20	17	15	13
10	46	34	27	22	42	32	25	21	27	22	19	23	19	16	19	16	13	12

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

	0°	90°	180°
0°	7180	7180	7180
5°	7163	6591	7150
10°	7047	6065	7021
15°	6904	5567	6860
20°	6715	5114	6683
25°	6514	4662	6458
30°	6264	4214	6216
35°	6023	3765	5953
40°	5757	3353	5677
45°	5476	2977	5395
50°	5176	2616	5077
55°	4856	2263	4741
60°	4512	1917	4391
65°	4135	1583	3987
70°	3693	1228	3518
75°	3098	873	2884
80°	2345	543	2146
85°	1402	237	1229



TEST NUMBER: P199522

CATALOG NUMBER: S125-DIW-U1-1-35-0048-1D-UDD-1-NA-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.7	1.7
10°-20°	299.6	4.7
20°-30°	440.2	6.9
30°-40°	508.4	8.0
40°-50°	503.9	7.9
50°-60°	437.0	6.9
60°-70°	319.2	5.0
70°-80°	174.4	2.7
80°-90°	45.3	0.7
90°-100°	37.4	0.6
100°-110°	250.5	3.9
110°-120°	459.5	7.2
120°-130°	595.7	9.4
130°-140°	647.3	10.2
140°-150°	611.8	9.6
150°-160°	497.7	7.8
160°-170°	323.6	5.1
170°-180°	111.9	1.8
0°-30°	846.5	13.3
0°-40°	1354.8	21.3
0°-60°	2295.7	36.0
0°-90°	2834.8	44.5
90°-120°	747.5	11.7
90°-150°	2602.3	40.9
90°-180°	3536.0	55.5
0°-180°	6370.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1135	1135	1135	1135	1135	
5°	1137	1128	1120	1127	1135	108
15°	1080	1065	1055	1061	1073	304
25°	973	960	948	956	965	447
35°	830	823	795	820	820	519
45°	668	659	632	656	658	515
55°	498	497	469	488	486	446
65°	331	328	310	320	319	328
75°	170	169	156	159	158	181
85°	40	42	37	37	35	45
90°	1	3	1	2	1	3
95°	25	8	8	12	58	37
105°	206	218	233	258	263	219
115°	433	451	464	487	485	427
125°	636	656	672	685	681	569
135°	819	838	844	861	850	630
145°	966	974	984	991	991	604
155°	1078	1074	1079	1088	1097	497
165°	1154	1147	1136	1154	1163	326
175°	1190	1178	1159	1180	1193	113
180°	1179	1179	1179	1179	1179	



TEST NUMBER: P199522

CATALOG NUMBER: S125-DIW-U1-1-35-0048-1D-UDD-1-NA-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1134.9	1134.9	1134.9	1134.9	1134.9	1134.9	1134.9	1134.9	1134.9
2.5°	1142.6	1130.8	1133.5	1131.4	1121.7	1130.1	1132.8	1128.7	1141.2
5°	1137.0	1125.2	1128.0	1125.2	1119.6	1123.8	1126.6	1122.4	1134.9
7.5°	1128.7	1116.2	1118.3	1115.5	1109.9	1113.4	1116.9	1112.7	1125.2
10°	1114.8	1103.0	1103.7	1100.2	1093.9	1098.1	1101.6	1098.1	1110.6
12.5°	1098.8	1086.3	1086.3	1080.7	1075.2	1078.7	1083.5	1080.7	1093.2
15°	1080.0	1066.9	1064.8	1061.3	1055.0	1059.2	1061.3	1060.6	1073.1
17.5°	1057.1	1043.2	1040.5	1039.8	1032.1	1037.7	1038.4	1036.3	1051.6
20°	1030.7	1017.5	1015.5	1014.8	1008.5	1012.7	1012.7	1009.9	1025.9
22.5°	1001.6	989.1	988.4	987.0	980.0	984.9	984.9	980.7	996.7
25°	973.1	957.8	959.9	956.4	948.1	955.0	955.7	948.8	964.8
27.5°	937.7	925.9	930.0	923.8	912.7	921.7	925.9	915.4	932.1
30°	902.9	890.4	897.4	886.3	876.5	884.9	892.5	879.3	896.0
32.5°	868.9	854.3	862.7	848.8	834.9	845.3	857.8	845.3	858.5
35°	830.0	818.2	823.1	808.5	794.6	805.0	820.3	808.5	820.3
37.5°	791.1	781.4	784.9	767.5	753.6	764.0	780.0	771.0	781.4
40°	750.8	743.9	743.9	726.5	712.6	722.3	739.0	734.2	740.4
42.5°	709.2	706.4	700.8	685.5	672.3	682.1	698.0	696.6	699.4
45°	668.2	668.2	659.1	643.2	632.1	641.1	655.7	659.1	658.4
47.5°	625.8	629.3	621.6	604.3	591.8	600.8	614.0	620.2	613.3
50°	583.4	589.7	580.0	564.7	550.8	560.5	571.6	580.0	572.3
52.5°	541.1	548.7	538.3	523.7	509.8	518.8	530.0	539.7	530.0
55°	498.0	507.0	497.3	482.0	468.8	477.2	488.3	498.0	486.2
57.5°	455.6	464.0	455.6	440.4	427.9	435.5	447.3	454.9	444.5
60°	413.3	422.3	414.0	399.4	387.6	393.8	404.9	412.6	402.2
62.5°	371.6	379.2	370.2	358.4	349.4	352.1	362.6	371.6	360.5
65°	330.6	337.6	327.8	317.4	309.8	311.2	320.2	325.1	318.8
67.5°	290.3	298.0	287.6	277.8	268.8	271.6	279.2	286.2	278.5
70°	250.0	257.7	246.6	238.2	230.6	232.0	238.2	245.9	238.2
72.5°	210.5	216.7	209.1	199.3	193.8	195.2	198.6	205.6	198.0
75°	170.2	177.1	168.8	161.1	155.6	157.0	159.1	164.6	158.4
77.5°	132.7	137.5	132.0	125.7	122.2	122.9	123.6	127.8	122.2
80°	97.9	102.1	98.6	93.8	91.0	91.0	91.0	94.5	89.6
82.5°	66.7	70.8	68.1	64.6	62.5	60.4	61.8	64.6	60.4
85°	39.6	43.1	41.7	38.2	36.8	35.4	36.8	38.2	34.7
87.5°	18.1	20.8	18.8	15.3	13.9	12.5	12.5	14.6	11.8
90°	1.4	3.5	2.8	2.1	1.4	1.4	2.1	2.8	1.4
92.5°	3.5	4.9	4.9	5.6	5.6	6.3	6.9	8.3	23.6
95°	25.0	27.8	7.6	8.3	8.3	9.0	11.8	67.4	57.6
97.5°	57.6	73.6	24.3	14.6	13.2	19.4	75.0	107.0	101.4
100°	102.8	114.6	116.0	75.7	51.4	106.3	147.9	159.8	152.1
102.5°	152.1	165.3	161.8	175.7	180.6	195.9	199.3	214.6	208.4
105°	205.6	220.2	218.1	232.0	233.4	250.7	257.7	266.7	263.2
107.5°	261.9	272.3	277.8	286.9	286.2	304.9	318.8	323.0	319.5
110°	319.5	326.4	336.9	343.1	343.1	361.9	377.8	378.5	375.1



TEST NUMBER: P199522

CATALOG NUMBER: S125-DIW-U1-1-35-0048-1D-UDD-1-NA-W

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	374.4	386.2	395.9	403.5	402.2	422.3	433.4	435.5	431.3
115°	432.7	437.6	450.8	461.9	464.0	479.3	486.9	489.0	484.8
117.5°	486.2	493.8	502.2	515.4	522.3	532.0	537.6	541.1	536.9
120°	543.2	548.0	552.9	565.4	577.9	583.4	587.6	590.4	586.9
122.5°	592.5	595.9	606.4	614.7	627.2	631.4	637.6	636.9	634.1
125°	636.2	641.1	656.4	661.2	671.6	677.2	684.8	680.7	680.7
127.5°	682.1	686.2	705.7	706.4	716.1	722.3	732.1	725.1	725.8
130°	727.2	734.2	751.5	751.5	759.2	766.1	777.2	766.8	769.6
132.5°	775.1	777.2	793.2	793.9	800.8	807.8	821.0	807.1	809.9
135°	818.9	816.8	837.6	834.2	843.9	848.1	861.3	844.6	849.5
137.5°	858.5	853.6	875.8	872.4	882.8	883.5	897.4	881.4	887.0
140°	897.4	891.8	910.6	908.5	920.3	918.9	929.3	916.1	923.8
142.5°	932.1	925.9	943.9	943.2	952.2	952.2	961.3	950.2	961.3
145°	966.1	957.8	974.5	973.8	983.5	982.8	991.1	980.7	991.1
147.5°	998.1	989.8	1003.0	1001.6	1009.9	1010.6	1017.5	1011.3	1022.4
150°	1027.3	1019.6	1028.0	1027.3	1034.9	1035.6	1042.5	1039.8	1048.1
152.5°	1053.7	1046.7	1050.9	1049.5	1060.6	1056.4	1064.8	1063.4	1072.4
155°	1078.0	1071.0	1074.5	1071.7	1079.4	1078.7	1087.7	1086.3	1096.7
157.5°	1100.2	1092.6	1095.3	1091.2	1096.7	1096.7	1107.1	1107.1	1114.8
160°	1121.7	1111.3	1114.8	1107.8	1109.9	1112.7	1125.2	1125.2	1132.1
162.5°	1137.0	1130.1	1132.1	1122.4	1124.5	1125.9	1140.5	1140.5	1148.8
165°	1153.7	1144.6	1146.7	1134.9	1135.6	1139.1	1153.7	1154.4	1163.4
167.5°	1166.9	1157.8	1157.1	1145.3	1148.8	1149.5	1163.4	1164.1	1173.8
170°	1177.3	1167.6	1167.6	1155.1	1157.8	1156.5	1171.0	1173.1	1181.5
172.5°	1182.8	1175.9	1173.8	1159.9	1159.2	1161.3	1176.6	1179.4	1187.7
175°	1189.8	1181.5	1178.0	1164.8	1159.2	1166.2	1180.1	1182.8	1192.6
177.5°	1191.9	1183.5	1180.8	1166.9	1166.9	1168.3	1182.2	1184.2	1191.9
180°	1179.4	1179.4	1179.4	1179.4	1179.4	1179.4	1179.4	1179.4	1179.4

(END OF REPORT)