

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: P199534

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199534  
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-LO-35-0048-1D-UDD-1-NA-W  
Description: DEFINE 5-INCH DIRECT/INDIRECT WALL LED LUMINAIRE  
UPLIGHT LL1-3500K, NO LENS  
DOWNLIGHT LLO-3500K, SATIN WHITE DIFFUSER  
Light Source: -  
757G  
Ballast/Driver: ELECTRONIC DRIVERS

**Summary**

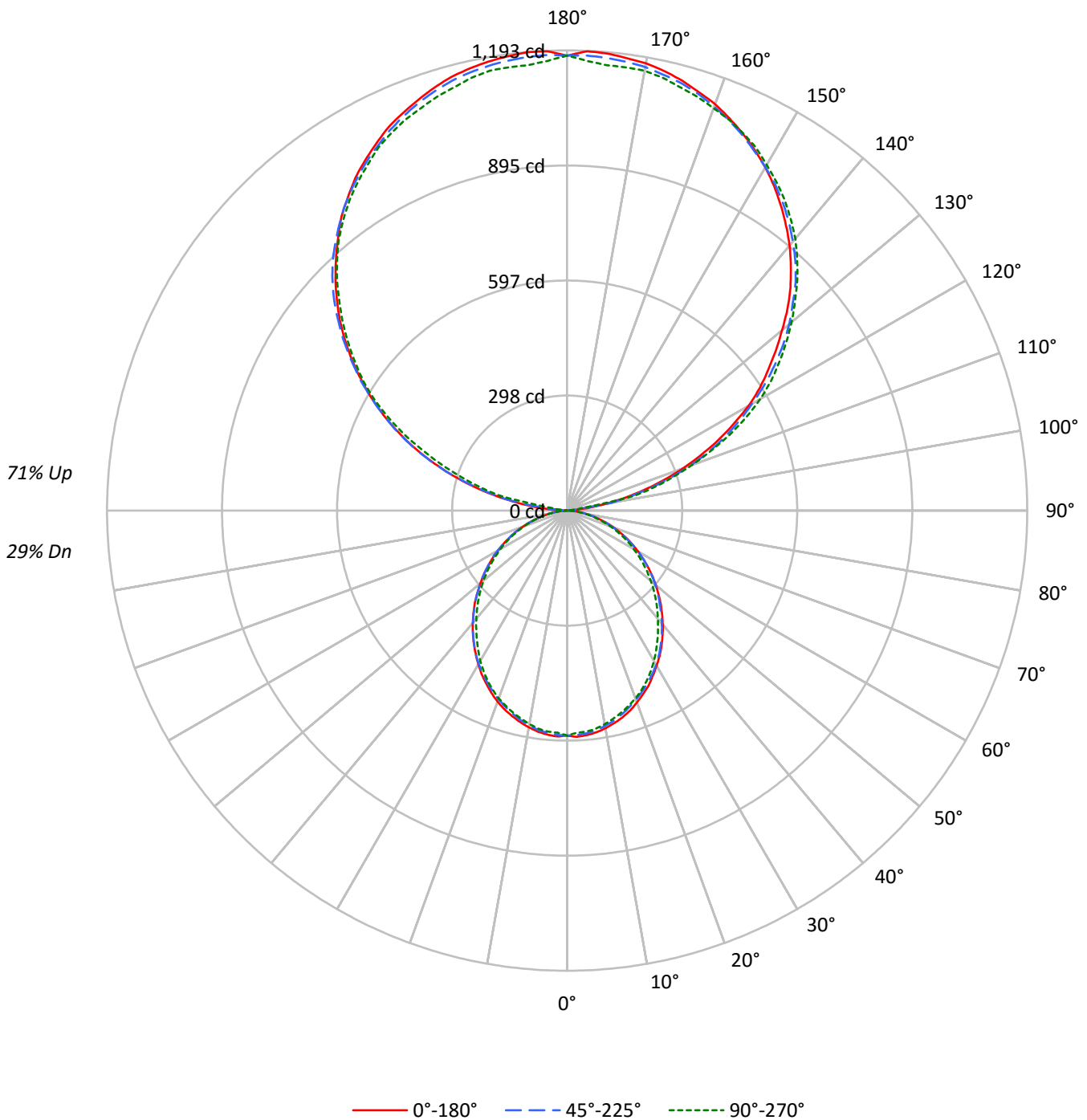
Lumens per Lamp: N/A  
Luminaire Lumens: 4992.0 lumens  
Efficiency: N/A  
Efficacy: 128.7 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.16 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4.08' x H: 0.38')  
CIE Type: Semi-Indirect

Input Watts (W): 38.8  
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: P199534

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

### Luminous Intensity Polar Plot





TEST NUMBER: P199534

CATALOG NUMBER: S125-DIW-U1-LO-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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	29
1	93	89	85	82	83	80	77	74	63	61	59	47	46	45	33	32	31	25
2	85	78	72	67	76	70	65	61	55	52	49	41	39	37	29	28	26	21
3	77	68	61	56	69	61	55	51	49	44	41	37	34	32	26	24	22	18
4	71	60	53	47	63	54	48	43	43	38	35	33	29	27	23	21	19	15
5	65	54	46	40	58	48	42	37	38	34	30	29	26	23	21	19	17	13
6	60	48	40	35	53	43	37	32	35	30	26	26	23	20	19	16	15	12
7	55	43	36	30	49	39	32	28	31	26	23	24	20	18	17	15	13	10
8	51	39	32	26	46	35	29	24	28	24	20	22	18	16	16	13	12	9
9	47	36	28	23	42	32	26	22	26	21	18	20	17	14	14	12	11	8
10	44	32	26	21	40	29	23	19	24	19	16	18	15	13	13	11	10	8

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

	0°	90°	180°
0°	3690	3690	3690
5°	3680	3387	3674
10°	3621	3116	3608
15°	3548	2861	3525
20°	3450	2628	3434
25°	3347	2396	3318
30°	3219	2165	3194
35°	3095	1934	3059
40°	2958	1723	2918
45°	2813	1529	2772
50°	2660	1344	2609
55°	2495	1163	2436
60°	2319	985	2255
65°	2125	813	2049
70°	1898	631	1808
75°	1591	448	1482
80°	1205	279	1102
85°	719	122	630



TEST NUMBER: P199534

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

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.8	1.1
10°-20°	153.9	3.1
20°-30°	226.2	4.5
30°-40°	261.2	5.2
40°-50°	258.9	5.2
50°-60°	224.6	4.5
60°-70°	164.0	3.3
70°-80°	89.6	1.8
80°-90°	23.3	0.5
90°-100°	37.3	0.7
100°-110°	250.5	5.0
110°-120°	459.5	9.2
120°-130°	595.7	11.9
130°-140°	647.3	13.0
140°-150°	611.8	12.3
150°-160°	497.7	10.0
160°-170°	323.6	6.5
170°-180°	111.9	2.2
0°-30°	434.9	8.7
0°-40°	696.2	13.9
0°-60°	1179.6	23.6
0°-90°	1456.6	29.2
90°-120°	747.3	15.0
90°-150°	2602.1	52.1
90°-180°	3535.0	70.8
0°-180°	4992.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	583	583	583	583	583	
5°	584	580	575	579	583	55
15°	555	547	542	545	551	156
25°	500	493	487	491	496	230
35°	426	423	408	422	422	267
45°	343	339	325	337	338	265
55°	256	256	241	251	250	229
65°	170	168	159	164	164	168
75°	87	87	80	82	81	93
85°	20	21	19	19	18	23
90°	1	1	1	1	1	2
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: P199534

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

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	583.2	583.2	583.2	583.2	583.2	583.2	583.2	583.2	583.2
2.5°	587.1	581.0	582.5	581.4	576.4	580.7	582.1	580.0	586.4
5°	584.2	578.2	579.6	578.2	575.3	577.5	578.9	576.7	583.2
7.5°	580.0	573.5	574.6	573.2	570.3	572.1	573.9	571.8	578.2
10°	572.8	566.8	567.1	565.3	562.1	564.3	566.0	564.3	570.7
12.5°	564.6	558.2	558.2	555.3	552.5	554.3	556.8	555.3	561.8
15°	555.0	548.2	547.1	545.3	542.1	544.3	545.3	545.0	551.4
17.5°	543.2	536.1	534.6	534.3	530.4	533.2	533.6	532.5	540.3
20°	529.6	522.9	521.8	521.4	518.2	520.4	520.4	518.9	527.1
22.5°	514.6	508.2	507.9	507.2	503.6	506.1	506.1	503.9	512.2
25°	500.0	492.2	493.2	491.5	487.2	490.7	491.1	487.5	495.7
27.5°	481.8	475.7	477.9	474.7	469.0	473.6	475.7	470.4	479.0
30°	464.0	457.5	461.1	455.4	450.4	454.7	458.6	451.8	460.4
32.5°	446.5	439.0	443.3	436.1	429.0	434.3	440.8	434.3	441.1
35°	426.5	420.4	422.9	415.4	408.3	413.6	421.5	415.4	421.5
37.5°	406.5	401.5	403.3	394.4	387.2	392.6	400.8	396.2	401.5
40°	385.8	382.2	382.2	373.3	366.2	371.2	379.7	377.2	380.5
42.5°	364.4	363.0	360.1	352.3	345.5	350.5	358.7	358.0	359.4
45°	343.3	343.3	338.7	330.5	324.8	329.4	336.9	338.7	338.3
47.5°	321.6	323.4	319.4	310.5	304.1	308.7	315.5	318.7	315.1
50°	299.8	303.0	298.0	290.2	283.0	288.0	293.7	298.0	294.1
52.5°	278.0	282.0	276.6	269.1	262.0	266.6	272.3	277.3	272.3
55°	255.9	260.5	255.5	247.7	240.9	245.2	250.9	255.9	249.8
57.5°	234.1	238.4	234.1	226.3	219.9	223.8	229.8	233.8	228.4
60°	212.4	217.0	212.7	205.2	199.2	202.4	208.1	212.0	206.6
62.5°	190.9	194.9	190.2	184.2	179.5	180.9	186.3	190.9	185.2
65°	169.9	173.5	168.5	163.1	159.2	159.9	164.5	167.0	163.8
67.5°	149.2	153.1	147.8	142.8	138.1	139.5	143.5	147.0	143.1
70°	128.5	132.4	126.7	122.4	118.5	119.2	122.4	126.3	122.4
72.5°	108.1	111.4	107.4	102.4	99.6	100.3	102.1	105.6	101.7
75°	87.4	91.0	86.7	82.8	79.9	80.7	81.7	84.6	81.4
77.5°	68.2	70.7	67.8	64.6	62.8	63.2	63.5	65.7	62.8
80°	50.3	52.5	50.7	48.2	46.8	46.8	46.8	48.5	46.0
82.5°	34.3	36.4	35.0	33.2	32.1	31.1	31.8	33.2	31.1
85°	20.3	22.1	21.4	19.6	18.9	18.2	18.9	19.6	17.8
87.5°	9.3	10.7	9.6	7.9	7.1	6.4	6.4	7.5	6.1
90°	0.7	1.8	1.4	1.1	0.7	0.7	1.1	1.4	0.7
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: P199534

CATALOG NUMBER: S125-DIW-U1-LO-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)