

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: P199555

Luminaire Tested: **S125-DIW-ULO-1-30-0048-1D-UDD-1-5-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199555  
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-DIW-ULO-1-30-0048-1D-UDD-1-5-W  
Description: DEFINE 5-INCH DIRECT/INDIRECT WALL LED LUMINAIRE  
UPLIGHT LLO-3000K, SATIN WHITE DIFFUSER  
DOWNLIGHT LL1-3000K, SATIN WHITE DIFFUSER  
Light Source: -  
757G  
Ballast/Driver: ELECTRONIC DRIVERS

**Summary**

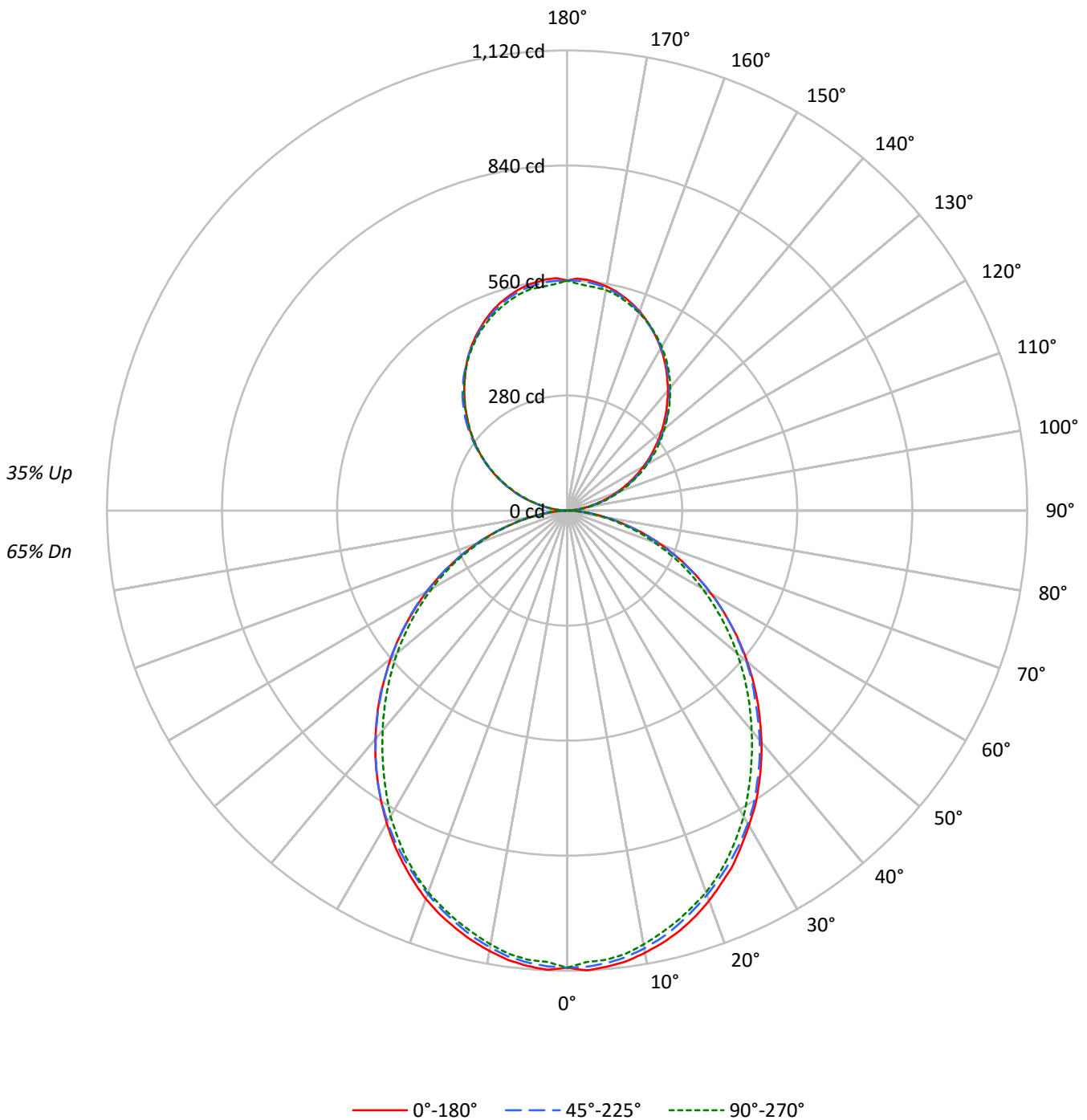
Lumens per Lamp: N/A  
Luminaire Lumens: 4286.6 lumens  
Efficiency: N/A  
Efficacy: 106.9 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.16 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4.08' x H: 0.38')  
CIE Type: Semi-Direct

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°	7038	7038	7038
5°	7021	6461	7009
10°	6908	5945	6882
15°	6768	5458	6724
20°	6583	5013	6551
25°	6385	4569	6330
30°	6140	4130	6093
35°	5904	3690	5835
40°	5643	3287	5565
45°	5367	2918	5289
50°	5074	2564	4977
55°	4760	2218	4647
60°	4422	1879	4303
65°	4053	1552	3908
70°	3620	1204	3449
75°	3036	855	2825
80°	2300	532	2103
85°	1374	232	1204



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.6	2.4
10°-20°	293.7	6.9
20°-30°	431.4	10.1
30°-40°	498.3	11.6
40°-50°	493.9	11.5
50°-60°	428.4	10.0
60°-70°	312.9	7.3
70°-80°	171.0	4.0
80°-90°	44.4	1.0
90°-100°	27.9	0.7
100°-110°	100.2	2.3
110°-120°	178.3	4.2
120°-130°	237.8	5.5
130°-140°	269.1	6.3
140°-150°	265.8	6.2
150°-160°	225.1	5.3
160°-170°	150.7	3.5
170°-180°	52.9	1.2
0°-30°	829.7	19.4
0°-40°	1328.0	31.0
0°-60°	2250.3	52.5
0°-90°	2778.7	64.8
90°-120°	306.5	7.2
90°-150°	1079.2	25.2
90°-180°	1508.0	35.2
0°-180°	4286.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1112	1112	1112	1112	1112	
5°	1114	1106	1098	1104	1112	106
15°	1059	1044	1034	1040	1052	298
25°	954	941	929	937	946	438
35°	814	807	779	804	804	509
45°	655	646	620	643	645	505
55°	488	488	460	479	477	437
65°	324	321	304	314	312	321
75°	167	165	152	156	155	178
85°	39	41	36	36	34	44
90°	1	3	1	2	1	4
95°	19	23	25	27	24	22
105°	85	92	95	99	97	91
115°	171	178	181	185	184	169
125°	257	263	268	272	269	230
135°	341	349	350	357	350	263
145°	420	424	428	430	429	263
155°	488	487	489	492	495	225
165°	538	535	531	538	542	152
175°	564	558	549	559	565	53
180°	560	560	560	560	560	



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CATALOG NUMBER: S125-DIW-ULO-1-30-0048-1D-UDD-1-5-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1112.5	1112.5	1112.5	1112.5	1112.5	1112.5	1112.5	1112.5	1112.5
2.5°	1120.0	1108.4	1111.1	1109.1	1099.5	1107.7	1110.4	1106.4	1118.6
5°	1114.5	1102.9	1105.7	1102.9	1097.5	1101.6	1104.3	1100.2	1112.5
7.5°	1106.4	1094.1	1096.1	1093.4	1088.0	1091.4	1094.8	1090.7	1102.9
10°	1092.7	1081.2	1081.8	1078.4	1072.3	1076.4	1079.8	1076.4	1088.6
12.5°	1077.1	1064.8	1064.8	1059.4	1053.9	1057.3	1062.1	1059.4	1071.6
15°	1058.7	1045.8	1043.7	1040.3	1034.2	1038.3	1040.3	1039.6	1051.9
17.5°	1036.2	1022.6	1019.9	1019.2	1011.7	1017.2	1017.8	1015.8	1030.8
20°	1010.4	997.4	995.4	994.7	988.6	992.7	992.7	989.9	1005.6
22.5°	981.8	969.5	968.8	967.5	960.7	965.4	965.4	961.3	977.0
25°	953.8	938.9	940.9	937.5	929.3	936.1	936.8	930.0	945.7
27.5°	919.1	907.5	911.6	905.5	894.6	903.5	907.5	897.3	913.7
30°	885.1	872.8	879.6	868.7	859.2	867.4	874.9	861.9	878.3
32.5°	851.7	837.4	845.6	832.0	818.4	828.6	840.8	828.6	841.5
35°	813.6	802.0	806.8	792.5	778.9	789.1	804.1	792.5	804.1
37.5°	775.5	765.9	769.3	752.3	738.7	748.9	764.6	755.7	765.9
40°	736.0	729.2	729.2	712.1	698.5	708.1	724.4	719.6	725.8
42.5°	695.1	692.4	687.0	672.0	659.0	668.6	684.2	682.9	685.6
45°	655.0	655.0	646.1	630.4	619.6	628.4	642.7	646.1	645.4
47.5°	613.4	616.8	609.3	592.3	580.1	588.9	601.9	608.0	601.2
50°	571.9	578.0	568.5	553.5	539.9	549.4	560.3	568.5	561.0
52.5°	530.4	537.9	527.6	513.3	499.7	508.6	519.5	529.0	519.5
55°	488.2	497.0	487.5	472.5	459.6	467.7	478.6	488.2	476.6
57.5°	446.6	454.8	446.6	431.6	419.4	426.9	438.5	445.9	435.7
60°	405.1	413.9	405.8	391.5	379.9	386.0	396.9	404.4	394.2
62.5°	364.2	371.7	362.9	351.3	342.5	345.2	355.4	364.2	353.4
65°	324.1	330.9	321.4	311.1	303.7	305.0	313.9	318.6	312.5
67.5°	284.6	292.1	281.9	272.3	263.5	266.2	273.7	280.5	273.0
70°	245.1	252.6	241.7	233.5	226.0	227.4	233.5	241.0	233.5
72.5°	206.3	212.4	204.9	195.4	190.0	191.3	194.7	201.5	194.0
75°	166.8	173.6	165.4	158.0	152.5	153.9	155.9	161.4	155.2
77.5°	130.0	134.8	129.4	123.2	119.8	120.5	121.2	125.3	119.8
80°	96.0	100.1	96.7	91.9	89.2	89.2	89.2	92.6	87.8
82.5°	65.4	69.4	66.7	63.3	61.3	59.2	60.6	63.3	59.2
85°	38.8	42.2	40.8	37.4	36.1	34.7	36.1	37.4	34.0
87.5°	17.7	20.4	18.4	15.0	13.6	12.3	12.3	14.3	11.6
90°	1.4	3.4	2.7	2.0	1.4	1.4	2.0	2.7	1.4
92.5°	6.6	9.1	9.1	8.0	9.8	11.2	13.6	13.6	11.9
95°	19.2	21.7	22.7	23.4	25.2	25.9	26.6	26.6	24.5
97.5°	32.9	36.4	37.1	38.1	40.2	40.6	41.6	42.0	39.5
100°	48.3	52.5	53.2	54.6	57.0	57.4	58.8	59.5	57.0
102.5°	65.8	70.7	71.7	72.8	74.5	75.9	77.7	78.7	75.9
105°	85.0	91.0	91.7	93.1	95.2	96.6	98.7	99.4	96.9
107.5°	106.4	110.9	113.0	113.7	115.8	117.2	120.0	120.3	118.2
110°	127.3	131.5	134.3	135.0	137.1	138.5	141.3	141.3	139.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	149.0	153.6	156.0	156.7	159.2	160.2	163.0	163.4	161.6
115°	171.1	175.3	178.1	178.8	180.9	182.3	184.7	185.4	183.7
117.5°	193.1	197.3	199.4	200.8	203.3	204.3	205.7	206.8	205.0
120°	214.5	218.7	220.4	222.5	224.9	226.0	228.1	227.4	226.3
122.5°	236.1	240.0	241.7	244.2	247.0	247.3	248.7	248.4	247.7
125°	257.1	260.3	263.4	264.8	268.0	268.0	271.8	268.7	268.7
127.5°	278.5	280.9	285.1	285.8	288.6	289.0	293.5	289.0	290.0
130°	299.5	301.2	306.8	306.8	308.9	309.6	315.6	309.3	310.7
132.5°	320.1	321.5	328.2	327.5	329.6	330.3	336.9	329.6	329.2
135°	340.7	341.4	349.1	348.1	350.2	351.2	357.2	349.1	349.5
137.5°	361.0	360.7	368.7	368.4	370.5	371.2	376.8	367.3	369.8
140°	381.7	379.2	387.6	388.3	390.4	391.1	395.0	387.6	389.7
142.5°	400.6	399.5	405.8	406.9	409.7	409.7	413.2	405.8	408.6
145°	419.8	417.4	424.4	424.4	427.5	427.2	430.0	425.1	428.9
147.5°	438.7	435.6	441.5	441.9	444.6	444.6	447.1	442.2	447.1
150°	455.8	453.0	457.2	457.6	460.4	460.0	462.5	460.0	464.2
152.5°	472.3	469.5	472.3	471.9	475.4	474.4	477.5	475.4	480.3
155°	488.0	484.9	487.3	485.9	488.7	488.4	491.9	491.2	495.0
157.5°	502.4	498.9	501.0	499.2	501.0	501.3	505.2	504.8	509.0
160°	515.7	512.2	513.6	510.4	512.2	512.5	517.4	517.4	521.6
162.5°	527.6	523.7	525.1	520.2	522.0	522.0	528.3	528.3	532.5
165°	537.7	534.2	535.3	529.3	531.1	531.4	537.7	538.1	541.9
167.5°	546.8	543.0	543.3	537.7	539.1	539.5	545.1	545.8	550.3
170°	553.8	550.3	550.3	544.0	545.1	545.4	551.4	552.4	556.9
172.5°	559.4	555.5	554.9	548.2	547.5	549.3	555.2	557.3	561.5
175°	563.6	559.4	558.3	551.7	549.3	552.8	558.7	560.4	565.3
177.5°	565.3	561.1	560.4	553.5	553.1	554.2	559.7	561.8	566.0
180°	559.7	559.7	559.7	559.7	559.7	559.7	559.7	559.7	559.7

(END OF REPORT)