

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: P199531

Luminaire Tested: **S125-DIP-U1-LO-30-X-X0048-1D-UDD-1-5-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199531  
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-U1-LO-30-X-X0048-1D-UDD-1-5-W  
Description: DEFINE 5-INCH DIRECT/INDIRECT PENDANT LED LUMINAIRE  
UPLIGHT LL1-3000K, SATIN WHITE DIFFUSER  
DOWNLIGHT LLO-3000K, SATIN WHITE DIFFUSER  
Light Source: -  
757G  
Ballast/Driver: ELECTRONIC DRIVERS

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4362.0 lumens  
Efficiency: N/A  
Efficacy: 112.4 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

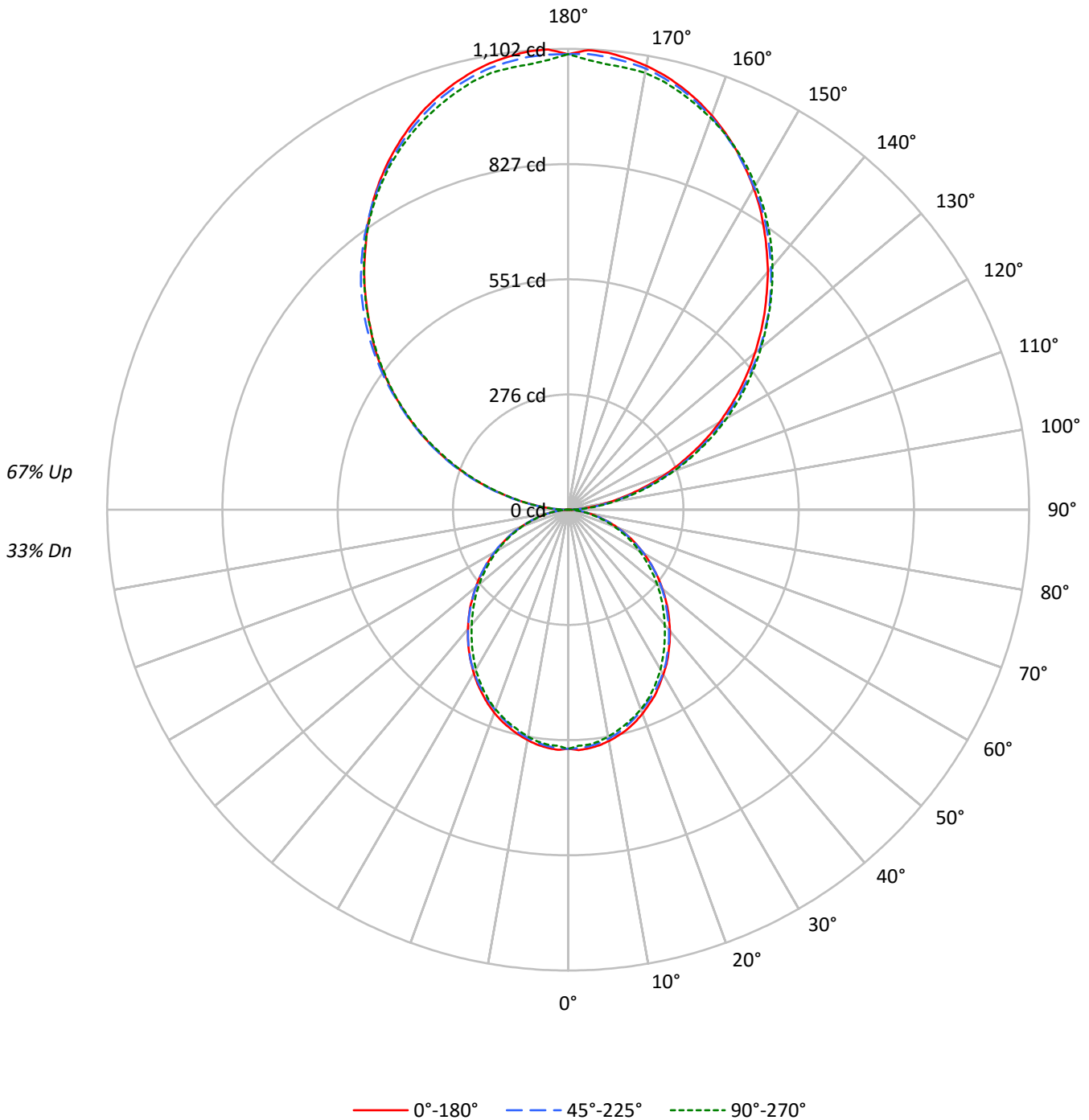
Input Watts (W): 38.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	90	86	83	85	81	78	75	65	62	60	50	48	47	36	35	34	28
2	86	78	72	67	77	71	66	62	57	53	50	44	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	38	36	33	28	26	24	20
4	71	61	53	47	64	55	49	43	44	40	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	40	35	31	31	27	25	22	20	18	15
6	60	48	41	35	54	44	37	32	36	31	27	28	24	21	20	18	16	13
7	56	44	36	31	50	40	33	28	32	27	23	25	22	19	19	16	14	12
8	51	40	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13	10
9	48	36	29	24	43	33	26	22	27	22	19	21	18	15	16	13	12	9
10	45	33	26	21	40	30	24	20	25	20	17	19	16	14	15	12	11	8

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

	0°	90°	180°
0°	3616	3616	3616
5°	3608	3320	3601
10°	3550	3055	3536
15°	3477	2804	3455
20°	3382	2576	3366
25°	3281	2348	3253
30°	3155	2122	3131
35°	3034	1896	2998
40°	2900	1689	2859
45°	2757	1499	2718
50°	2607	1317	2558
55°	2446	1140	2388
60°	2273	965	2212
65°	2082	797	2009
70°	1860	618	1772
75°	1560	440	1453
80°	1181	273	1080
85°	705	119	620



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.7	1.2
10°-20°	150.9	3.5
20°-30°	221.7	5.1
30°-40°	256.1	5.9
40°-50°	253.8	5.8
50°-60°	220.1	5.0
60°-70°	160.8	3.7
70°-80°	87.9	2.0
80°-90°	22.8	0.5
90°-100°	53.9	1.2
100°-110°	195.1	4.5
110°-120°	347.1	8.0
120°-130°	462.9	10.6
130°-140°	523.6	12.0
140°-150°	517.3	11.9
150°-160°	438.0	10.0
160°-170°	293.3	6.7
170°-180°	103.0	2.4
0°-30°	426.3	9.8
0°-40°	682.4	15.6
0°-60°	1156.3	26.5
0°-90°	1427.8	32.7
90°-120°	596.1	13.7
90°-150°	2099.9	48.1
90°-180°	2934.0	67.3
0°-180°	4362.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	572	572	572	572	572	
5°	573	568	564	567	572	54
15°	544	536	531	535	540	153
25°	490	484	478	481	486	225
35°	418	415	400	413	413	261
45°	336	332	318	330	332	260
55°	251	250	236	246	245	224
65°	166	165	156	161	161	165
75°	86	85	78	80	80	91
85°	20	21	18	18	18	22
90°	1	1	1	1	1	3
95°	37	44	49	52	48	42
105°	165	178	185	192	189	177
115°	333	346	352	360	357	329
125°	500	513	522	529	523	448
135°	663	680	682	695	680	512
145°	817	826	832	837	835	511
155°	950	948	951	957	963	437
165°	1046	1042	1034	1046	1055	295
175°	1097	1087	1069	1087	1100	104
180°	1089	1089	1089	1089	1089	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	571.6	571.6	571.6	571.6	571.6	571.6	571.6	571.6	571.6
2.5°	575.5	569.5	570.9	569.9	565.0	569.2	570.6	568.5	574.8
5°	572.7	566.7	568.1	566.7	563.9	566.0	567.4	565.3	571.6
7.5°	568.5	562.2	563.2	561.8	559.0	560.8	562.5	560.4	566.7
10°	561.5	555.5	555.9	554.2	551.0	553.1	554.9	553.1	559.4
12.5°	553.5	547.2	547.2	544.4	541.6	543.3	545.8	544.4	550.7
15°	544.0	537.4	536.3	534.6	531.4	533.5	534.6	534.2	540.5
17.5°	532.5	525.5	524.1	523.7	519.9	522.7	523.0	522.0	529.7
20°	519.2	512.5	511.5	511.1	508.0	510.1	510.1	508.7	516.7
22.5°	504.5	498.2	497.8	497.1	493.6	496.1	496.1	494.0	502.0
25°	490.1	482.4	483.5	481.7	477.5	481.0	481.4	477.9	485.9
27.5°	472.3	466.3	468.4	465.3	459.7	464.2	466.3	461.1	469.5
30°	454.8	448.5	452.0	446.4	441.5	445.7	449.5	442.9	451.3
32.5°	437.7	430.3	434.5	427.5	420.5	425.8	432.1	425.8	432.4
35°	418.1	412.1	414.6	407.2	400.2	405.5	413.2	407.2	413.2
37.5°	398.5	393.6	395.3	386.6	379.6	384.8	392.9	388.3	393.6
40°	378.2	374.7	374.7	365.9	358.9	363.8	372.2	369.8	372.9
42.5°	357.2	355.8	353.0	345.3	338.6	343.5	351.6	350.9	352.3
45°	336.5	336.5	332.0	324.0	318.4	322.9	330.3	332.0	331.7
47.5°	315.2	317.0	313.1	304.4	298.1	302.6	309.3	312.4	308.9
50°	293.9	297.0	292.1	284.4	277.4	282.3	287.9	292.1	288.3
52.5°	272.5	276.4	271.1	263.8	256.8	261.3	266.9	271.8	266.9
55°	250.8	255.4	250.5	242.8	236.1	240.3	245.9	250.8	244.9
57.5°	229.5	233.7	229.5	221.8	215.5	219.4	225.3	229.1	223.9
60°	208.2	212.7	208.5	201.2	195.2	198.4	204.0	207.8	202.6
62.5°	187.2	191.0	186.5	180.5	176.0	177.4	182.6	187.2	181.6
65°	166.5	170.0	165.1	159.9	156.0	156.7	161.3	163.7	160.6
67.5°	146.2	150.1	144.8	139.9	135.4	136.8	140.6	144.1	140.3
70°	125.9	129.8	124.2	120.0	116.1	116.8	120.0	123.8	120.0
72.5°	106.0	109.2	105.3	100.4	97.6	98.3	100.1	103.6	99.7
75°	85.7	89.2	85.0	81.2	78.4	79.1	80.1	82.9	79.8
77.5°	66.8	69.3	66.5	63.3	61.6	61.9	62.3	64.4	61.6
80°	49.3	51.4	49.7	47.2	45.8	45.8	45.8	47.6	45.1
82.5°	33.6	35.7	34.3	32.5	31.5	30.4	31.1	32.5	30.4
85°	19.9	21.7	21.0	19.2	18.5	17.8	18.5	19.2	17.5
87.5°	9.1	10.5	9.4	7.7	7.0	6.3	6.3	7.3	5.9
90°	0.7	1.7	1.4	1.0	0.7	0.7	1.0	1.4	0.7
92.5°	12.9	17.7	17.7	15.7	19.1	21.8	26.6	26.6	23.1
95°	37.4	42.2	44.3	45.6	49.0	50.4	51.7	51.7	47.7
97.5°	64.0	70.8	72.2	74.2	78.3	79.0	81.0	81.7	76.9
100°	94.0	102.1	103.5	106.2	111.0	111.7	114.4	115.7	111.0
102.5°	128.0	137.5	139.6	141.6	145.0	147.7	151.1	153.2	147.7
105°	165.4	177.0	178.4	181.1	185.2	187.9	192.0	193.4	188.6
107.5°	207.0	215.8	219.9	221.3	225.4	228.1	233.5	234.2	230.1
110°	247.8	256.0	261.4	262.8	266.9	269.6	275.1	275.1	271.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	290.0	298.9	303.7	305.0	309.8	311.8	317.3	317.9	314.5
115°	332.9	341.1	346.5	347.9	352.0	354.7	359.5	360.8	357.4
117.5°	375.8	384.0	388.1	390.8	395.6	397.6	400.3	402.4	399.0
120°	417.3	425.5	428.9	433.0	437.8	439.8	443.9	442.5	440.5
122.5°	459.6	467.1	470.5	475.2	480.7	481.3	484.1	483.4	482.0
125°	500.4	506.5	512.7	515.4	521.5	521.5	529.0	522.9	522.9
127.5°	541.9	546.7	554.9	556.2	561.7	562.4	571.2	562.4	564.4
130°	582.8	586.2	597.1	597.1	601.2	602.5	614.1	601.9	604.6
132.5°	623.0	625.7	638.6	637.3	641.3	642.7	655.6	641.3	640.7
135°	663.1	664.5	679.5	677.4	681.5	683.6	695.1	679.5	680.2
137.5°	702.6	701.9	717.6	716.9	721.0	722.4	733.3	714.9	719.6
140°	742.8	738.0	754.4	755.7	759.8	761.2	768.7	754.4	758.4
142.5°	779.6	777.5	789.8	791.8	797.3	797.3	804.1	789.8	795.2
145°	817.0	812.2	825.8	825.8	832.0	831.3	836.7	827.2	834.7
147.5°	853.8	847.6	859.2	859.9	865.3	865.3	870.1	860.6	870.1
150°	887.1	881.7	889.8	890.5	896.0	895.3	900.1	895.3	903.5
152.5°	919.1	913.7	919.1	918.4	925.2	923.2	929.3	925.2	934.8
155°	949.8	943.6	948.4	945.7	951.1	950.4	957.2	955.9	963.4
157.5°	977.7	970.9	975.0	971.5	975.0	975.6	983.1	982.4	990.6
160°	1003.5	996.7	999.5	993.3	996.7	997.4	1006.9	1006.9	1015.1
162.5°	1026.7	1019.2	1021.9	1012.4	1015.8	1015.8	1028.1	1028.1	1036.2
165°	1046.4	1039.6	1041.7	1030.1	1033.5	1034.2	1046.4	1047.1	1054.6
167.5°	1064.1	1056.7	1057.3	1046.4	1049.2	1049.8	1060.7	1062.1	1070.9
170°	1077.8	1070.9	1070.9	1058.7	1060.7	1061.4	1073.0	1075.0	1083.9
172.5°	1088.6	1081.2	1079.8	1066.9	1065.5	1068.9	1080.5	1084.6	1092.7
175°	1096.8	1088.6	1086.6	1073.7	1068.9	1075.7	1087.3	1090.7	1100.2
177.5°	1100.2	1092.1	1090.7	1077.1	1076.4	1078.4	1089.3	1093.4	1101.6
180°	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3

(END OF REPORT)