

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: P199535

Luminaire Tested: **S125-DIP-U1-LO-40-X-X0048-1D-UDD-1-5-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199535  
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-40-X-X0048-1D-UDD-1-5-W  
Description: DEFINE 5-INCH DIRECT/INDIRECT PENDANT LED LUMINAIRE  
UPLIGHT LL1-4000K, SATIN WHITE DIFFUSER  
DOWNLIGHT LLO-4000K, SATIN WHITE DIFFUSER  
Light Source: -  
757G  
Ballast/Driver: ELECTRONIC DRIVERS

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4593.6 lumens  
Efficiency: N/A  
Efficacy: 118.4 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

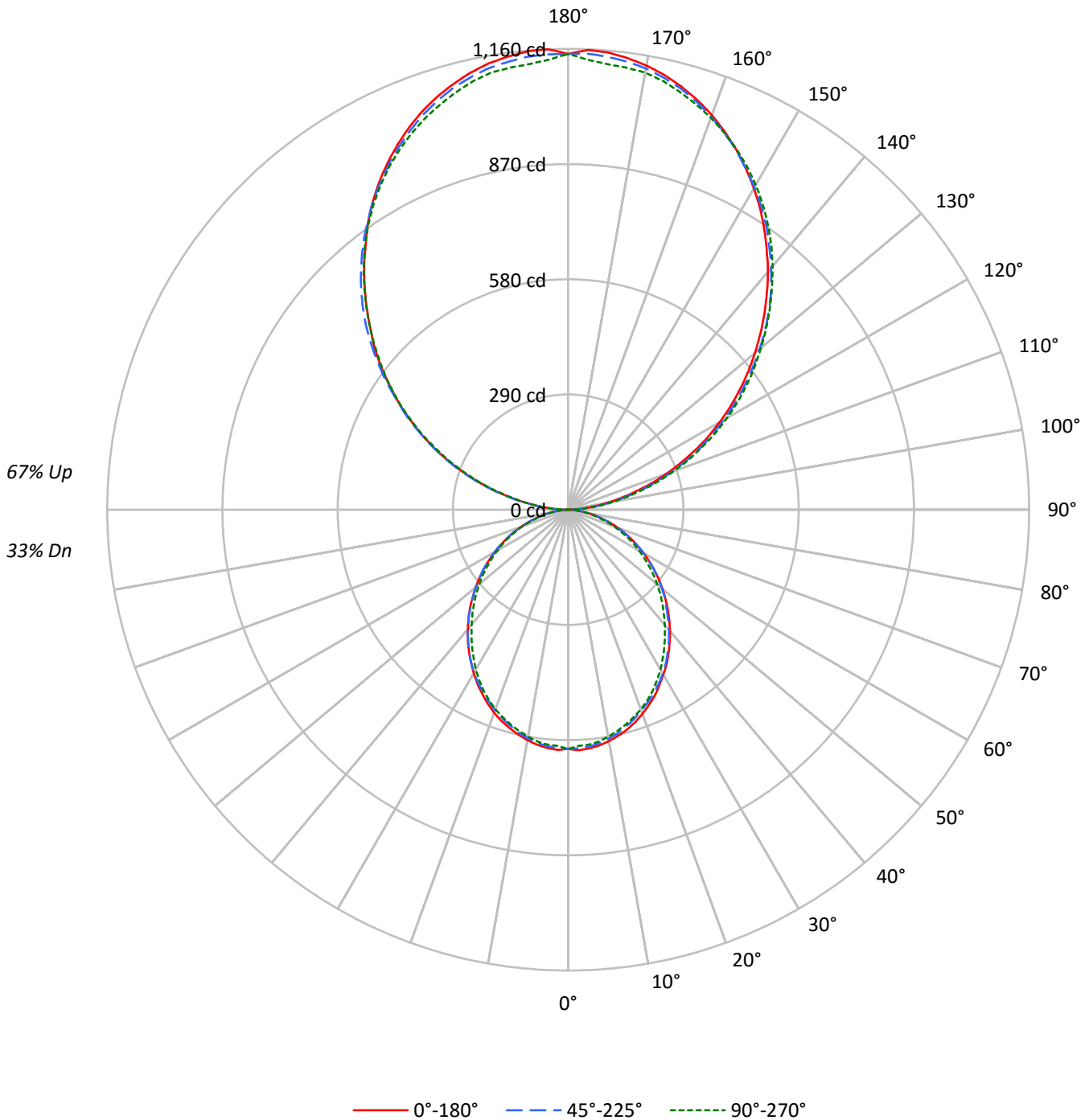
Input Watts (W): 38.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P199535

CATALOG NUMBER: S125-DIP-U1-LO-40-X-X0048-1D-UDD-1-5-W

### Luminous Intensity Polar Plot





TEST NUMBER: P199535

CATALOG NUMBER: S125-DIP-U1-LO-40-X-X0048-1D-UDD-1-5-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	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°	3809	3809	3809
5°	3800	3496	3793
10°	3738	3217	3724
15°	3662	2953	3639
20°	3562	2713	3545
25°	3455	2473	3425
30°	3322	2235	3297
35°	3195	1997	3157
40°	3054	1779	3011
45°	2904	1579	2862
50°	2746	1388	2693
55°	2576	1200	2515
60°	2393	1017	2328
65°	2194	839	2115
70°	1959	651	1867
75°	1644	463	1529
80°	1243	288	1138
85°	744	125	652



TEST NUMBER: P199535

CATALOG NUMBER: S125-DIP-U1-LO-40-X-X0048-1D-UDD-1-5-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.6	1.2
10°-20°	158.9	3.5
20°-30°	233.5	5.1
30°-40°	269.6	5.9
40°-50°	267.3	5.8
50°-60°	231.8	5.0
60°-70°	169.3	3.7
70°-80°	92.5	2.0
80°-90°	24.1	0.5
90°-100°	56.8	1.2
100°-110°	205.4	4.5
110°-120°	365.5	8.0
120°-130°	487.4	10.6
130°-140°	551.4	12.0
140°-150°	544.7	11.9
150°-160°	461.3	10.0
160°-170°	308.9	6.7
170°-180°	108.4	2.4
0°-30°	449.0	9.8
0°-40°	718.6	15.6
0°-60°	1217.7	26.5
0°-90°	1503.7	32.7
90°-120°	627.8	13.7
90°-150°	2211.4	48.1
90°-180°	3090.0	67.3
0°-180°	4593.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	602	602	602	602	602	
5°	603	598	594	598	602	57
15°	573	565	560	563	569	161
25°	516	509	503	507	512	237
35°	440	437	422	435	435	275
45°	354	350	335	348	349	273
55°	264	264	249	259	258	236
65°	175	174	164	170	169	174
75°	90	90	82	84	84	96
85°	21	22	20	20	18	24
90°	1	2	1	1	1	3
95°	39	47	52	54	50	44
105°	174	188	195	202	199	186
115°	351	365	371	379	376	347
125°	527	540	549	557	551	471
135°	698	716	718	732	716	539
145°	860	870	876	881	879	538
155°	1000	999	1002	1008	1014	460
165°	1102	1097	1088	1102	1111	311
175°	1155	1144	1126	1145	1159	110
180°	1147	1147	1147	1147	1147	



TEST NUMBER: P199535

CATALOG NUMBER: S125-DIP-U1-LO-40-X-X0048-1D-UDD-1-5-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	602.0	602.0	602.0	602.0	602.0	602.0	602.0	602.0	602.0
2.5°	606.1	599.8	601.3	600.2	595.0	599.4	600.9	598.7	605.3
5°	603.1	596.8	598.3	596.8	593.9	596.1	597.6	595.4	602.0
7.5°	598.7	592.1	593.2	591.7	588.7	590.6	592.4	590.2	596.8
10°	591.3	585.1	585.4	583.6	580.3	582.5	584.3	582.5	589.1
12.5°	582.8	576.2	576.2	573.3	570.3	572.2	574.7	573.3	579.9
15°	572.9	565.9	564.8	562.9	559.6	561.8	562.9	562.6	569.2
17.5°	560.7	553.4	551.9	551.5	547.5	550.4	550.8	549.7	557.8
20°	546.7	539.7	538.6	538.3	534.9	537.2	537.2	535.7	544.2
22.5°	531.3	524.6	524.3	523.5	519.8	522.4	522.4	520.2	528.7
25°	516.2	508.1	509.2	507.3	502.9	506.6	506.9	503.3	511.7
27.5°	497.4	491.1	493.3	490.0	484.1	488.9	491.1	485.6	494.4
30°	478.9	472.3	476.0	470.1	464.9	469.4	473.4	466.4	475.3
32.5°	460.9	453.2	457.6	450.2	442.8	448.4	455.0	448.4	455.4
35°	440.3	434.0	436.6	428.8	421.5	427.0	435.1	428.8	435.1
37.5°	419.6	414.5	416.3	407.1	399.7	405.3	413.7	408.9	414.5
40°	398.3	394.6	394.6	385.4	378.0	383.2	392.0	389.4	392.7
42.5°	376.2	374.7	371.7	363.6	356.6	361.8	370.3	369.5	371.0
45°	354.4	354.4	349.6	341.2	335.3	340.1	347.8	349.6	349.3
47.5°	331.9	333.8	329.7	320.5	313.9	318.7	325.7	329.0	325.3
50°	309.5	312.8	307.6	299.5	292.2	297.3	303.2	307.6	303.6
52.5°	287.0	291.1	285.5	277.8	270.4	275.2	281.1	286.3	281.1
55°	264.2	268.9	263.8	255.7	248.7	253.1	259.0	264.2	257.9
57.5°	241.7	246.1	241.7	233.6	226.9	231.0	237.3	241.3	235.8
60°	219.2	224.0	219.6	211.8	205.6	208.9	214.8	218.8	213.3
62.5°	197.1	201.2	196.4	190.1	185.3	186.8	192.3	197.1	191.2
65°	175.4	179.1	173.9	168.4	164.3	165.1	169.8	172.4	169.1
67.5°	154.0	158.1	152.5	147.4	142.6	144.1	148.1	151.8	147.7
70°	132.6	136.7	130.8	126.4	122.3	123.1	126.4	130.4	126.4
72.5°	111.6	114.9	110.9	105.7	102.8	103.5	105.4	109.1	105.0
75°	90.3	93.9	89.5	85.5	82.5	83.3	84.4	87.3	84.0
77.5°	70.4	72.9	70.0	66.7	64.8	65.2	65.6	67.8	64.8
80°	51.9	54.2	52.3	49.7	48.3	48.3	48.3	50.1	47.5
82.5°	35.4	37.6	36.1	34.3	33.2	32.1	32.8	34.3	32.1
85°	21.0	22.8	22.1	20.3	19.5	18.8	19.5	20.3	18.4
87.5°	9.6	11.1	9.9	8.1	7.4	6.6	6.6	7.7	6.3
90°	0.7	1.8	1.5	1.1	0.7	0.7	1.1	1.5	0.7
92.5°	13.6	18.6	18.6	16.5	20.1	22.9	28.0	28.0	24.4
95°	39.4	44.5	46.6	48.0	51.6	53.1	54.5	54.5	50.2
97.5°	67.4	74.6	76.0	78.2	82.5	83.2	85.3	86.0	81.0
100°	98.9	107.5	109.0	111.8	116.9	117.6	120.5	121.9	116.9
102.5°	134.8	144.8	147.0	149.1	152.7	155.6	159.2	161.3	155.6
105°	174.2	186.4	187.9	190.7	195.0	197.9	202.2	203.6	198.6
107.5°	218.0	227.3	231.6	233.0	237.3	240.2	245.9	246.6	242.3
110°	261.0	269.6	275.3	276.8	281.1	283.9	289.7	289.7	286.1



TEST NUMBER: P199535

CATALOG NUMBER: S125-DIP-U1-LO-40-X-X0048-1D-UDD-1-5-W

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	305.4	314.8	319.8	321.2	326.2	328.4	334.1	334.8	331.2
115°	350.6	359.2	364.9	366.4	370.7	373.5	378.6	380.0	376.4
117.5°	395.8	404.4	408.7	411.5	416.6	418.7	421.6	423.7	420.2
120°	439.5	448.1	451.7	456.0	461.0	463.2	467.5	466.0	463.9
122.5°	484.0	491.9	495.4	500.5	506.2	506.9	509.8	509.1	507.6
125°	527.0	533.4	539.9	542.8	549.2	549.2	557.1	550.6	550.6
127.5°	570.7	575.7	584.3	585.8	591.5	592.2	601.6	592.2	594.4
130°	613.7	617.3	628.8	628.8	633.1	634.5	646.7	633.8	636.7
132.5°	656.0	658.9	672.5	671.1	675.4	676.8	690.5	675.4	674.7
135°	698.3	699.8	715.6	713.4	717.7	719.9	732.0	715.6	716.3
137.5°	739.9	739.2	755.7	755.0	759.3	760.7	772.2	752.8	757.9
140°	782.2	777.2	794.4	795.9	800.2	801.6	809.5	794.4	798.7
142.5°	820.9	818.8	831.7	833.9	839.6	839.6	846.8	831.7	837.4
145°	860.4	855.4	869.7	869.7	876.2	875.4	881.2	871.1	879.0
147.5°	899.1	892.6	904.8	905.6	911.3	911.3	916.3	906.3	916.3
150°	934.2	928.5	937.1	937.8	943.6	942.8	947.9	942.8	951.4
152.5°	967.9	962.2	967.9	967.2	974.4	972.2	978.7	974.4	984.4
155°	1000.2	993.7	998.8	995.9	1001.6	1000.9	1008.1	1006.6	1014.5
157.5°	1029.6	1022.4	1026.7	1023.1	1026.7	1027.4	1035.3	1034.6	1043.2
160°	1056.8	1049.7	1052.5	1046.1	1049.7	1050.4	1060.4	1060.4	1069.0
162.5°	1081.2	1073.3	1076.2	1066.2	1069.7	1069.7	1082.6	1082.6	1091.3
165°	1102.0	1094.8	1097.0	1084.8	1088.4	1089.1	1102.0	1102.7	1110.6
167.5°	1120.6	1112.8	1113.5	1102.0	1104.9	1105.6	1117.1	1118.5	1127.8
170°	1135.0	1127.8	1127.8	1114.9	1117.1	1117.8	1130.0	1132.1	1141.4
172.5°	1146.5	1138.6	1137.1	1123.5	1122.1	1125.7	1137.9	1142.2	1150.8
175°	1155.1	1146.5	1144.3	1130.7	1125.7	1132.8	1145.0	1148.6	1158.6
177.5°	1158.6	1150.0	1148.6	1134.3	1133.6	1135.7	1147.2	1151.5	1160.1
180°	1147.2	1147.2	1147.2	1147.2	1147.2	1147.2	1147.2	1147.2	1147.2

(END OF REPORT)