

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: P199565

Luminaire Tested: **S125-DIP-ULO-2-40-X-X0048-1D-UDD-1-5-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199565  
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-ULO-2-40-X-X0048-1D-UDD-1-5-W  
Description: DEFINE 5-INCH DIRECT/INDIRECT PENDANT LED LUMINAIRE  
UPLIGHT LLO-4000K, SATIN WHITE DIFFUSER  
DOWNLIGHT LL2-4000K, SATIN WHITE DIFFUSER  
Light Source: -  
757G  
Ballast/Driver: ELECTRONIC DRIVERS

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5801.2 lumens  
Efficiency: N/A  
Efficacy: 105.3 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

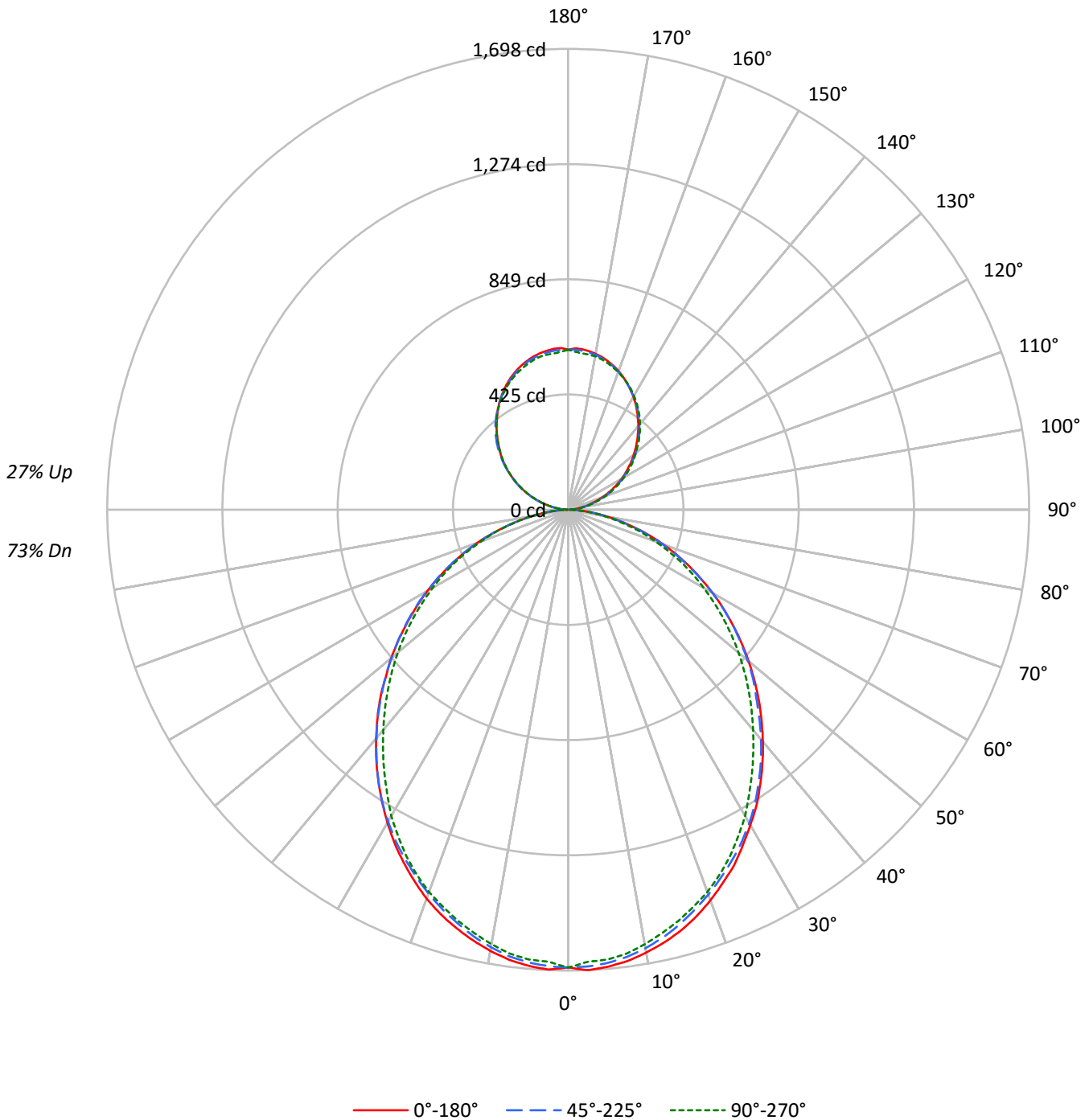
Input Watts (W): 55.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77	73
1	103	99	95	91	98	94	90	87	84	82	79	76	74	72	68	67	65	61
2	94	86	80	75	89	82	76	72	74	70	66	67	63	60	60	57	55	52
3	86	76	68	62	81	72	65	60	65	60	55	59	55	51	53	50	47	44
4	79	67	59	53	74	64	57	51	58	52	47	53	48	44	48	44	41	38
5	72	60	52	46	68	57	50	44	52	46	41	48	42	38	43	39	35	33
6	67	54	46	40	63	52	44	38	47	41	36	43	38	34	39	35	31	29
7	62	49	41	35	58	47	39	34	43	37	32	39	34	30	36	31	28	26
8	57	45	37	31	54	43	35	30	39	33	28	36	31	27	33	28	25	23
9	54	41	33	28	51	39	32	27	36	30	26	33	28	24	30	26	23	21
10	50	38	30	25	48	36	29	25	33	27	23	31	26	22	28	24	21	19

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

	0°	90°	180°
0°	10671	10671	10671
5°	10646	9796	10626
10°	10474	9014	10435
15°	10261	8274	10195
20°	9980	7601	9933
25°	9681	6929	9598
30°	9310	6262	9238
35°	8952	5595	8847
40°	8556	4983	8438
45°	8138	4424	8019
50°	7692	3887	7546
55°	7217	3363	7046
60°	6705	2848	6525
65°	6146	2352	5926
70°	5489	1825	5230
75°	4604	1297	4285
80°	3488	807	3191
85°	2082	352	1827



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	158.6	2.7
10°-20°	445.3	7.7
20°-30°	654.2	11.3
30°-40°	755.5	13.0
40°-50°	748.9	12.9
50°-60°	649.5	11.2
60°-70°	474.4	8.2
70°-80°	259.3	4.5
80°-90°	67.4	1.2
90°-100°	29.6	0.5
100°-110°	105.6	1.8
110°-120°	187.8	3.2
120°-130°	250.5	4.3
130°-140°	283.4	4.9
140°-150°	279.9	4.8
150°-160°	237.0	4.1
160°-170°	158.7	2.7
170°-180°	55.7	1.0
0°-30°	1258.0	21.7
0°-40°	2013.5	34.7
0°-60°	3412.0	58.8
0°-90°	4213.1	72.6
90°-120°	322.9	5.6
90°-150°	1136.7	19.6
90°-180°	1588.0	27.4
0°-180°	5801.2	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1687	1687	1687	1687	1687	
5°	1690	1676	1664	1674	1687	160
15°	1605	1582	1568	1577	1595	452
25°	1446	1427	1409	1420	1434	665
35°	1234	1223	1181	1219	1219	771
45°	993	980	939	974	979	766
55°	740	739	697	726	723	662
65°	491	487	460	476	474	487
75°	253	251	231	236	235	269
85°	59	62	55	55	52	66
90°	2	4	2	3	2	5
95°	20	24	26	28	26	23
105°	90	96	100	104	102	96
115°	180	188	190	194	193	178
125°	271	277	282	286	283	242
135°	359	368	369	376	368	277
145°	442	447	450	453	452	277
155°	514	513	515	518	521	237
165°	566	564	559	566	571	160
175°	594	588	578	588	595	56
180°	590	590	590	590	590	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1686.7	1686.7	1686.7	1686.7	1686.7	1686.7	1686.7	1686.7	1686.7
2.5°	1698.1	1680.6	1684.7	1681.6	1667.1	1679.5	1683.6	1677.5	1696.0
5°	1689.8	1672.3	1676.4	1672.3	1664.0	1670.2	1674.4	1668.2	1686.7
7.5°	1677.5	1658.9	1662.0	1657.8	1649.6	1654.7	1659.9	1653.7	1672.3
10°	1656.8	1639.3	1640.3	1635.1	1625.8	1632.0	1637.2	1632.0	1650.6
12.5°	1633.1	1614.5	1614.5	1606.2	1598.0	1603.1	1610.4	1606.2	1624.8
15°	1605.2	1585.6	1582.5	1577.3	1568.0	1574.2	1577.3	1576.3	1594.9
17.5°	1571.1	1550.5	1546.4	1545.3	1534.0	1542.2	1543.3	1540.2	1562.9
20°	1531.9	1512.3	1509.2	1508.2	1498.9	1505.1	1505.1	1500.9	1524.7
22.5°	1488.5	1470.0	1468.9	1466.9	1456.5	1463.8	1463.8	1457.6	1481.3
25°	1446.2	1423.5	1426.6	1421.4	1409.1	1419.4	1420.4	1410.1	1433.8
27.5°	1393.6	1376.0	1382.2	1372.9	1356.4	1369.8	1376.0	1360.5	1385.3
30°	1342.0	1323.4	1333.7	1317.2	1302.7	1315.1	1326.5	1306.9	1331.6
32.5°	1291.4	1269.7	1282.1	1261.4	1240.8	1256.3	1274.9	1256.3	1275.9
35°	1233.6	1216.0	1223.3	1201.6	1180.9	1196.4	1219.1	1201.6	1219.1
37.5°	1175.8	1161.3	1166.5	1140.7	1120.0	1135.5	1159.2	1145.8	1161.3
40°	1115.9	1105.6	1105.6	1079.8	1059.1	1073.6	1098.3	1091.1	1100.4
42.5°	1054.0	1049.8	1041.6	1018.9	999.2	1013.7	1037.4	1035.4	1039.5
45°	993.1	993.1	979.6	955.9	939.4	952.8	974.5	979.6	978.6
47.5°	930.1	935.2	923.9	898.1	879.5	892.9	912.5	921.8	911.5
50°	867.1	876.4	862.0	839.2	818.6	833.0	849.6	862.0	850.6
52.5°	804.1	815.5	800.0	778.3	757.7	771.1	787.6	802.1	787.6
55°	740.1	753.6	739.1	716.4	696.8	709.2	725.7	740.1	722.6
57.5°	677.2	689.6	677.2	654.5	635.9	647.2	664.8	676.1	660.7
60°	614.2	627.6	615.2	593.6	576.0	585.3	601.8	613.2	597.7
62.5°	552.3	563.6	550.2	532.7	519.2	523.4	538.8	552.3	535.8
65°	491.4	501.7	487.2	471.8	460.4	462.5	475.9	483.1	473.8
67.5°	431.5	442.8	427.4	412.9	399.5	403.6	415.0	425.3	413.9
70°	371.6	383.0	366.5	354.1	342.7	344.8	354.1	365.4	354.1
72.5°	312.8	322.1	310.7	296.3	288.0	290.1	295.2	305.6	294.2
75°	252.9	263.2	250.8	239.5	231.2	233.3	236.4	244.7	235.4
77.5°	197.2	204.4	196.1	186.8	181.7	182.7	183.7	189.9	181.7
80°	145.6	151.7	146.6	139.4	135.2	135.2	135.2	140.4	133.2
82.5°	99.1	105.3	101.2	96.0	92.9	89.8	91.9	96.0	89.8
85°	58.8	64.0	61.9	56.8	54.7	52.6	54.7	56.8	51.6
87.5°	26.8	31.0	27.9	22.7	20.6	18.6	18.6	21.7	17.5
90°	2.1	5.2	4.1	3.1	2.1	2.1	3.1	4.1	2.1
92.5°	7.0	9.6	9.6	8.5	10.3	11.8	14.4	14.4	12.5
95°	20.3	22.8	23.9	24.7	26.5	27.3	28.0	28.0	25.8
97.5°	34.6	38.3	39.1	40.2	42.4	42.7	43.8	44.2	41.6
100°	50.8	55.3	56.0	57.5	60.1	60.4	61.9	62.6	60.1
102.5°	69.3	74.4	75.5	76.6	78.5	79.9	81.8	82.9	79.9
105°	89.5	95.8	96.5	98.0	100.2	101.7	103.9	104.6	102.1
107.5°	112.0	116.8	119.0	119.7	121.9	123.4	126.4	126.7	124.5
110°	134.1	138.5	141.5	142.2	144.4	145.9	148.8	148.8	147.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	156.9	161.7	164.3	165.1	167.6	168.7	171.7	172.1	170.2
115°	180.2	184.6	187.5	188.3	190.5	191.9	194.5	195.3	193.4
117.5°	203.4	207.8	210.0	211.5	214.1	215.2	216.6	217.7	215.9
120°	225.8	230.3	232.1	234.3	236.9	238.0	240.2	239.5	238.4
122.5°	248.7	252.7	254.6	257.2	260.1	260.5	261.9	261.6	260.8
125°	270.8	274.1	277.4	278.9	282.2	282.2	286.3	282.9	282.9
127.5°	293.3	295.8	300.3	301.0	303.9	304.3	309.1	304.3	305.4
130°	315.4	317.2	323.1	323.1	325.3	326.1	332.3	325.7	327.2
132.5°	337.1	338.6	345.6	344.8	347.1	347.8	354.8	347.1	346.7
135°	358.8	359.6	367.7	366.6	368.8	369.9	376.2	367.7	368.1
137.5°	380.2	379.8	388.3	387.9	390.2	390.9	396.8	386.8	389.4
140°	401.9	399.4	408.2	408.9	411.2	411.9	415.9	408.2	410.4
142.5°	421.8	420.7	427.4	428.5	431.4	431.4	435.1	427.4	430.3
145°	442.1	439.5	446.9	446.9	450.2	449.8	452.8	447.6	451.7
147.5°	462.0	458.7	464.9	465.3	468.3	468.3	470.8	465.7	470.8
150°	480.1	477.1	481.5	481.9	484.8	484.5	487.1	484.5	488.9
152.5°	497.4	494.4	497.4	497.0	500.7	499.6	502.9	500.7	505.8
155°	513.9	510.6	513.2	511.7	514.7	514.3	518.0	517.3	521.3
157.5°	529.1	525.4	527.6	525.7	527.6	527.9	532.0	531.6	536.1
160°	543.1	539.4	540.8	537.5	539.4	539.7	544.9	544.9	549.3
162.5°	555.6	551.5	553.0	547.8	549.7	549.7	556.3	556.3	560.7
165°	566.3	562.6	563.7	557.4	559.3	559.6	566.3	566.6	570.7
167.5°	575.8	571.8	572.2	566.3	567.7	568.1	574.0	574.7	579.5
170°	583.2	579.5	579.5	572.9	574.0	574.4	580.6	581.7	586.5
172.5°	589.1	585.1	584.3	577.3	576.6	578.4	584.7	586.9	591.3
175°	593.5	589.1	588.0	581.0	578.4	582.1	588.4	590.2	595.4
177.5°	595.4	590.9	590.2	582.8	582.5	583.6	589.5	591.7	596.1
180°	589.5	589.5	589.5	589.5	589.5	589.5	589.5	589.5	589.5

(END OF REPORT)