

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: P199530

Luminaire Tested: **S125-DIW-U1-2-40-0048-1D-UDD-1-NA-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199530  
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-U1-2-40-0048-1D-UDD-1-NA-W  
Description: DEFINE 5-INCH DIRECT/INDIRECT WALL LED LUMINAIRE  
UPLIGHT LL1-4000K, NO LENS  
DOWNLIGHT LL2-4000K, SATIN WHITE DIFFUSER  
Light Source: -  
757G  
Ballast/Driver: ELECTRONIC DRIVERS

**Summary**

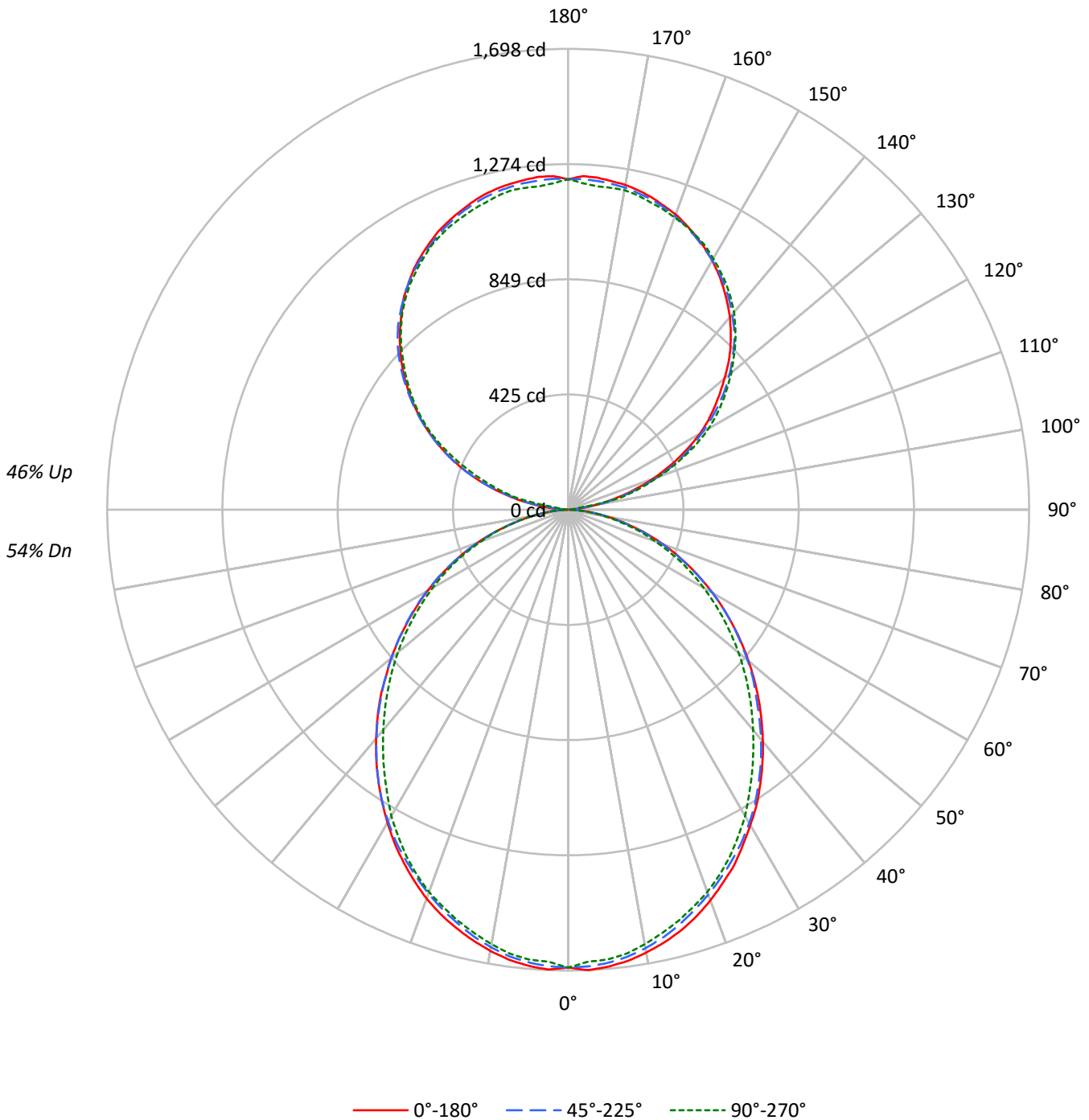
Lumens per Lamp: N/A  
Luminaire Lumens: 7862.8 lumens  
Efficiency: N/A  
Efficacy: 117.4 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.16 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4.08' x H: 0.38')  
CIE Type: General Diffuse

Input Watts (W): 67  
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

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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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59	54
1	99	94	90	87	91	88	84	81	75	73	70	63	62	60	53	51	50	45
2	90	82	76	71	83	77	71	67	66	62	58	56	53	50	46	44	42	38
3	82	73	65	59	76	68	61	56	58	53	49	49	46	43	41	39	36	32
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	31	28
5	69	57	49	43	64	53	46	41	46	41	36	40	35	32	33	30	27	24
6	64	51	43	37	59	48	41	35	42	36	32	36	31	28	30	27	24	21
7	59	46	38	33	54	43	36	31	38	32	28	33	28	25	28	24	21	19
8	55	42	34	29	51	40	33	28	35	29	25	30	25	22	25	22	19	17
9	51	39	31	26	47	36	29	25	32	26	22	27	23	20	23	20	17	15
10	48	35	28	23	44	33	27	22	29	24	20	25	21	18	22	18	16	14

**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	2.0
10°-20°	445.3	5.7
20°-30°	654.2	8.3
30°-40°	755.5	9.6
40°-50°	748.9	9.5
50°-60°	649.5	8.3
60°-70°	474.4	6.0
70°-80°	259.3	3.3
80°-90°	67.4	0.9
90°-100°	38.8	0.5
100°-110°	258.6	3.3
110°-120°	474.3	6.0
120°-130°	615.0	7.8
130°-140°	668.2	8.5
140°-150°	631.5	8.0
150°-160°	513.7	6.5
160°-170°	334.1	4.2
170°-180°	115.5	1.5
0°-30°	1258.0	16.0
0°-40°	2013.5	25.6
0°-60°	3412.0	43.4
0°-90°	4213.1	53.6
90°-120°	771.7	9.8
90°-150°	2686.4	34.2
90°-180°	3650.0	46.4
0°-180°	7862.8	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°	26	8	9	12	60	38
105°	212	225	241	266	272	226
115°	447	465	479	503	500	440
125°	657	678	693	707	703	588
135°	845	865	871	889	877	651
145°	997	1006	1015	1023	1023	624
155°	1113	1109	1114	1123	1132	513
165°	1191	1184	1172	1191	1201	336
175°	1228	1216	1197	1218	1231	117
180°	1217	1217	1217	1217	1217	



TEST NUMBER: P199530

CATALOG NUMBER: S125-DIW-U1-2-40-0048-1D-UDD-1-NA-W

**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°	3.6	5.0	5.0	5.7	5.7	6.5	7.2	8.6	24.4
95°	25.8	28.7	7.9	8.6	8.6	9.3	12.2	69.5	59.5
97.5°	59.5	76.0	25.1	15.1	13.6	20.1	77.4	110.4	104.7
100°	106.1	118.3	119.7	78.2	53.1	109.7	152.7	164.9	157.0
102.5°	157.0	170.6	167.1	181.4	186.4	202.2	205.8	221.5	215.1
105°	212.2	227.3	225.1	239.5	240.9	258.8	266.0	275.3	271.7
107.5°	270.3	281.1	286.8	296.1	295.4	314.8	329.1	333.4	329.8
110°	329.8	337.0	347.7	354.2	354.2	373.5	390.0	390.8	387.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	386.5	398.6	408.7	416.6	415.1	435.9	447.4	449.5	445.2
115°	446.7	451.7	465.3	476.8	478.9	494.7	502.6	504.8	500.5
117.5°	501.9	509.8	518.4	532.0	539.2	549.2	554.9	558.5	554.2
120°	560.7	565.7	570.7	583.6	596.5	602.3	606.6	609.4	605.9
122.5°	611.6	615.2	625.9	634.5	647.4	651.7	658.2	657.5	654.6
125°	656.8	661.8	677.6	682.6	693.3	699.1	706.9	702.6	702.6
127.5°	704.1	708.4	728.5	729.2	739.2	745.7	755.7	748.5	749.2
130°	750.7	757.9	775.8	775.8	783.7	790.8	802.3	791.6	794.4
132.5°	800.2	802.3	818.8	819.5	826.7	833.9	847.5	833.1	836.0
135°	845.3	843.2	864.7	861.1	871.1	875.4	889.1	871.9	876.9
137.5°	886.2	881.2	904.1	900.5	911.3	912.0	926.3	909.9	915.6
140°	926.3	920.6	940.0	937.8	950.0	948.6	959.3	945.7	953.6
142.5°	962.2	955.7	974.4	973.7	983.0	983.0	992.3	980.8	992.3
145°	997.3	988.7	1005.9	1005.2	1015.3	1014.5	1023.1	1012.4	1023.1
147.5°	1030.3	1021.7	1035.3	1033.9	1042.5	1043.2	1050.4	1043.9	1055.4
150°	1060.4	1052.5	1061.1	1060.4	1068.3	1069.0	1076.2	1073.3	1081.9
152.5°	1087.7	1080.5	1084.8	1083.4	1094.8	1090.5	1099.1	1097.7	1107.0
155°	1112.8	1105.6	1109.2	1106.3	1114.2	1113.5	1122.8	1121.4	1132.1
157.5°	1135.7	1127.8	1130.7	1126.4	1132.1	1132.1	1142.9	1142.9	1150.8
160°	1157.9	1147.2	1150.8	1143.6	1145.7	1148.6	1161.5	1161.5	1168.7
162.5°	1173.7	1166.5	1168.7	1158.6	1160.8	1162.2	1177.3	1177.3	1185.9
165°	1190.9	1181.6	1183.7	1171.6	1172.3	1175.9	1190.9	1191.6	1201.0
167.5°	1204.5	1195.2	1194.5	1182.3	1185.9	1186.6	1201.0	1201.7	1211.7
170°	1215.3	1205.3	1205.3	1192.3	1195.2	1193.8	1208.8	1211.0	1219.6
172.5°	1221.0	1213.9	1211.7	1197.4	1196.6	1198.8	1214.6	1217.4	1226.0
175°	1228.2	1219.6	1216.0	1202.4	1196.6	1203.8	1218.2	1221.0	1231.1
177.5°	1230.3	1221.7	1218.9	1204.5	1204.5	1206.0	1220.3	1222.5	1230.3
180°	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4

(END OF REPORT)