

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: P199538

Luminaire Tested: **S125-DIW-U2-1-30-0048-1D-UDD-1-NA-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199538  
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-U2-1-30-0048-1D-UDD-1-NA-W  
Description: DEFINE 5-INCH DIRECT/INDIRECT WALL LED LUMINAIRE  
UPLIGHT LL2-3000K, NO LENS  
DOWNLIGHT LL1-3000K, SATIN WHITE DIFFUSER  
Light Source: -  
757G  
Ballast/Driver: ELECTRONIC DRIVERS

**Summary**

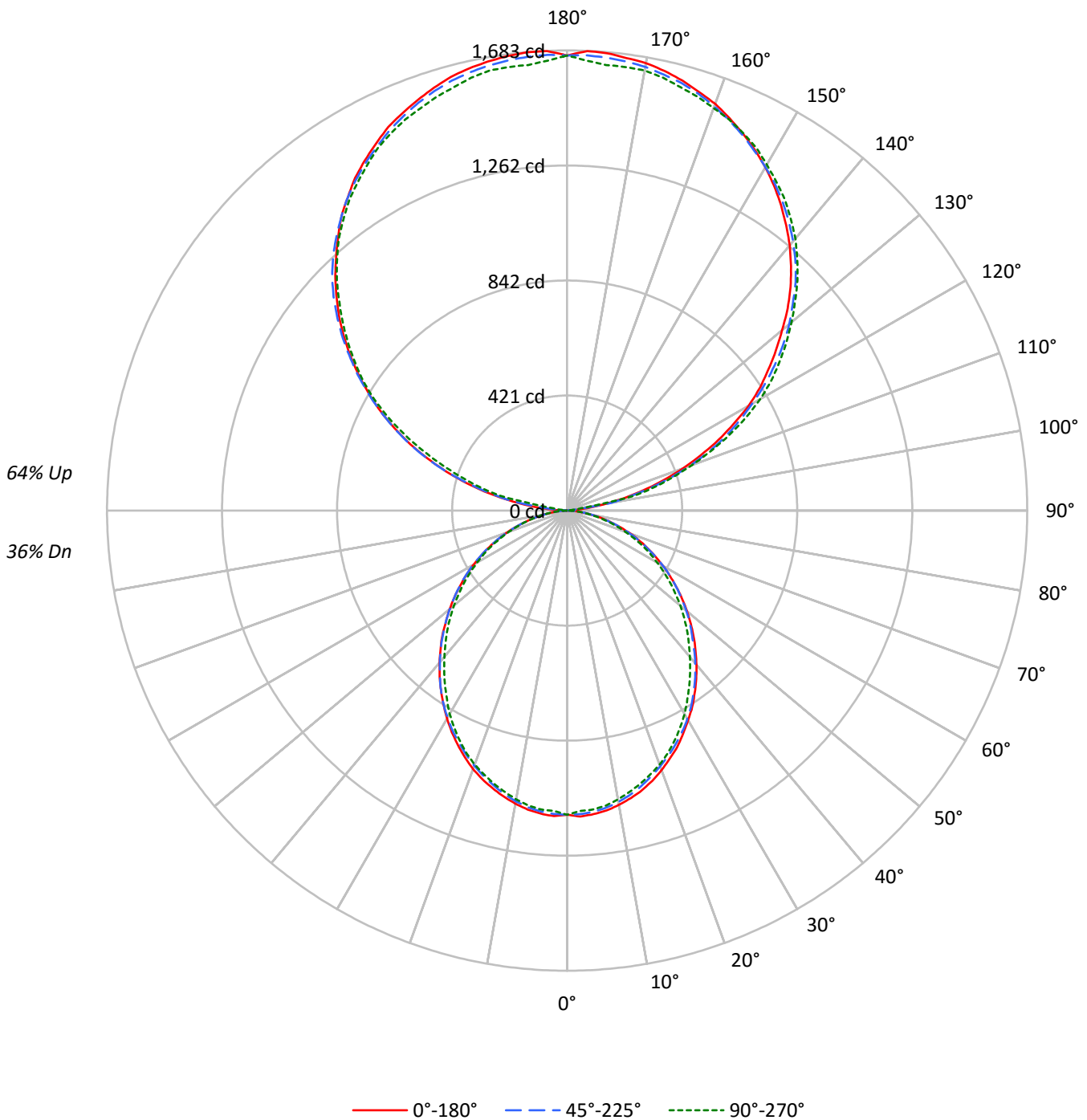
Lumens per Lamp: N/A  
Luminaire Lumens: 7768.1 lumens  
Efficiency: N/A  
Efficacy: 118.6 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.16 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4.08' x H: 0.38')  
CIE Type: Semi-Indirect

Input Watts (W): 65.5  
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	104	104	104	104	94	94	94	94	75	75	75	59	59	59	43	43	43	36
1	95	90	87	83	86	82	79	76	66	64	62	52	50	49	38	37	36	30
2	86	79	73	68	78	72	67	62	58	54	51	45	43	41	34	32	31	25
3	79	69	62	57	71	63	57	52	51	47	43	40	37	35	30	28	26	22
4	72	61	54	48	65	56	49	44	45	41	37	36	32	30	27	24	23	19
5	66	55	47	41	59	50	43	38	41	35	32	32	28	26	24	22	20	16
6	61	49	41	35	55	45	38	33	36	31	27	29	25	22	22	19	17	14
7	56	44	36	31	51	40	33	29	33	28	24	26	22	20	20	17	15	13
8	52	40	32	27	47	37	30	25	30	25	21	24	20	18	18	16	14	11
9	48	36	29	24	44	33	27	22	27	23	19	22	18	16	17	14	12	10
10	45	33	26	22	41	31	24	20	25	20	17	20	17	14	16	13	11	9

**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	1.3
10°-20°	293.7	3.8
20°-30°	431.4	5.6
30°-40°	498.3	6.4
40°-50°	493.9	6.4
50°-60°	428.4	5.5
60°-70°	312.9	4.0
70°-80°	171.0	2.2
80°-90°	44.4	0.6
90°-100°	52.7	0.7
100°-110°	353.5	4.6
110°-120°	648.5	8.3
120°-130°	840.8	10.8
130°-140°	913.5	11.8
140°-150°	863.4	11.1
150°-160°	702.4	9.0
160°-170°	456.7	5.9
170°-180°	157.9	2.0
0°-30°	829.7	10.7
0°-40°	1328.0	17.1
0°-60°	2250.3	29.0
0°-90°	2778.7	35.8
90°-120°	1054.8	13.6
90°-150°	3672.4	47.3
90°-180°	4989.0	64.2
0°-180°	7768.1	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	3
95°	35	11	12	17	81	52
105°	290	308	329	364	372	309
115°	611	636	655	687	684	602
125°	898	926	948	966	961	804
135°	1156	1182	1191	1216	1199	890
145°	1364	1375	1388	1399	1399	853
155°	1521	1516	1523	1535	1548	701
165°	1628	1618	1603	1628	1642	460
175°	1679	1662	1636	1665	1683	160
180°	1664	1664	1664	1664	1664	



TEST NUMBER: P199538

CATALOG NUMBER: S125-DIW-U2-1-30-0048-1D-UDD-1-NA-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°	4.9	6.9	6.9	7.8	7.8	8.8	9.8	11.8	33.3
95°	35.3	39.2	10.8	11.8	11.8	12.7	16.7	95.1	81.4
97.5°	81.4	103.9	34.3	20.6	18.6	27.4	105.9	151.0	143.1
100°	145.1	161.7	163.7	106.8	72.5	150.0	208.8	225.5	214.7
102.5°	214.7	233.3	228.4	248.0	254.9	276.4	281.3	302.9	294.1
105°	290.1	310.7	307.8	327.4	329.4	353.9	363.7	376.4	371.5
107.5°	369.5	384.2	392.1	404.8	403.9	430.3	449.9	455.8	450.9
110°	450.9	460.7	475.4	484.2	484.2	510.7	533.2	534.2	529.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	528.3	545.0	558.7	569.5	567.6	596.0	611.7	614.6	608.7
115°	610.7	617.5	636.2	651.9	654.8	676.4	687.1	690.1	684.2
117.5°	686.2	696.9	708.7	727.3	737.1	750.9	758.7	763.6	757.7
120°	766.5	773.4	780.3	797.9	815.5	823.4	829.3	833.2	828.3
122.5°	836.1	841.0	855.7	867.5	885.1	891.0	899.8	898.9	894.9
125°	897.9	904.7	926.3	933.2	947.9	955.7	966.5	960.6	960.6
127.5°	962.6	968.5	995.9	996.9	1010.6	1019.4	1033.2	1023.4	1024.3
130°	1026.3	1036.1	1060.6	1060.6	1071.4	1081.2	1096.9	1082.2	1086.1
132.5°	1093.9	1096.9	1119.4	1120.4	1130.2	1140.0	1158.6	1139.0	1142.9
135°	1155.7	1152.7	1182.2	1177.3	1191.0	1196.9	1215.5	1192.0	1198.8
137.5°	1211.6	1204.7	1236.1	1231.2	1245.9	1246.8	1266.5	1243.9	1251.7
140°	1266.5	1258.6	1285.1	1282.1	1298.8	1296.8	1311.5	1292.9	1303.7
142.5°	1315.5	1306.6	1332.1	1331.1	1343.9	1343.9	1356.6	1340.9	1356.6
145°	1363.5	1351.7	1375.3	1374.3	1388.0	1387.0	1398.8	1384.1	1398.8
147.5°	1408.6	1396.8	1415.4	1413.5	1425.2	1426.2	1436.0	1427.2	1442.9
150°	1449.8	1439.0	1450.7	1449.8	1460.5	1461.5	1471.3	1467.4	1479.2
152.5°	1487.0	1477.2	1483.1	1481.1	1496.8	1490.9	1502.7	1500.7	1513.5
155°	1521.3	1511.5	1516.4	1512.5	1523.3	1522.3	1535.0	1533.1	1547.8
157.5°	1552.7	1541.9	1545.8	1539.9	1547.8	1547.8	1562.5	1562.5	1573.3
160°	1583.1	1568.4	1573.3	1563.5	1566.4	1570.3	1588.0	1588.0	1597.8
162.5°	1604.6	1594.8	1597.8	1584.0	1587.0	1588.9	1609.5	1609.5	1621.3
165°	1628.2	1615.4	1618.4	1601.7	1602.7	1607.6	1628.2	1629.1	1641.9
167.5°	1646.8	1634.0	1633.1	1616.4	1621.3	1622.3	1641.9	1642.9	1656.6
170°	1661.5	1647.8	1647.8	1630.1	1634.0	1632.1	1652.7	1655.6	1667.4
172.5°	1669.3	1659.5	1656.6	1637.0	1636.0	1638.9	1660.5	1664.4	1676.2
175°	1679.1	1667.4	1662.5	1643.8	1636.0	1645.8	1665.4	1669.3	1683.0
177.5°	1682.1	1670.3	1666.4	1646.8	1646.8	1648.7	1668.3	1671.3	1682.1
180°	1664.4	1664.4	1664.4	1664.4	1664.4	1664.4	1664.4	1664.4	1664.4

(END OF REPORT)