

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: P199542

Luminaire Tested: **S125-DIW-U2-1-40-0048-1D-UDD-1-NA-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199542  
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-U2-1-40-0048-1D-UDD-1-NA-W  
Description: DEFINE 5-INCH DIRECT/INDIRECT WALL LED LUMINAIRE  
UPLIGHT LL2-4000K, NO LENS  
DOWNLIGHT LL1-4000K, SATIN WHITE DIFFUSER  
Light Source: -  
757G  
Ballast/Driver: ELECTRONIC DRIVERS

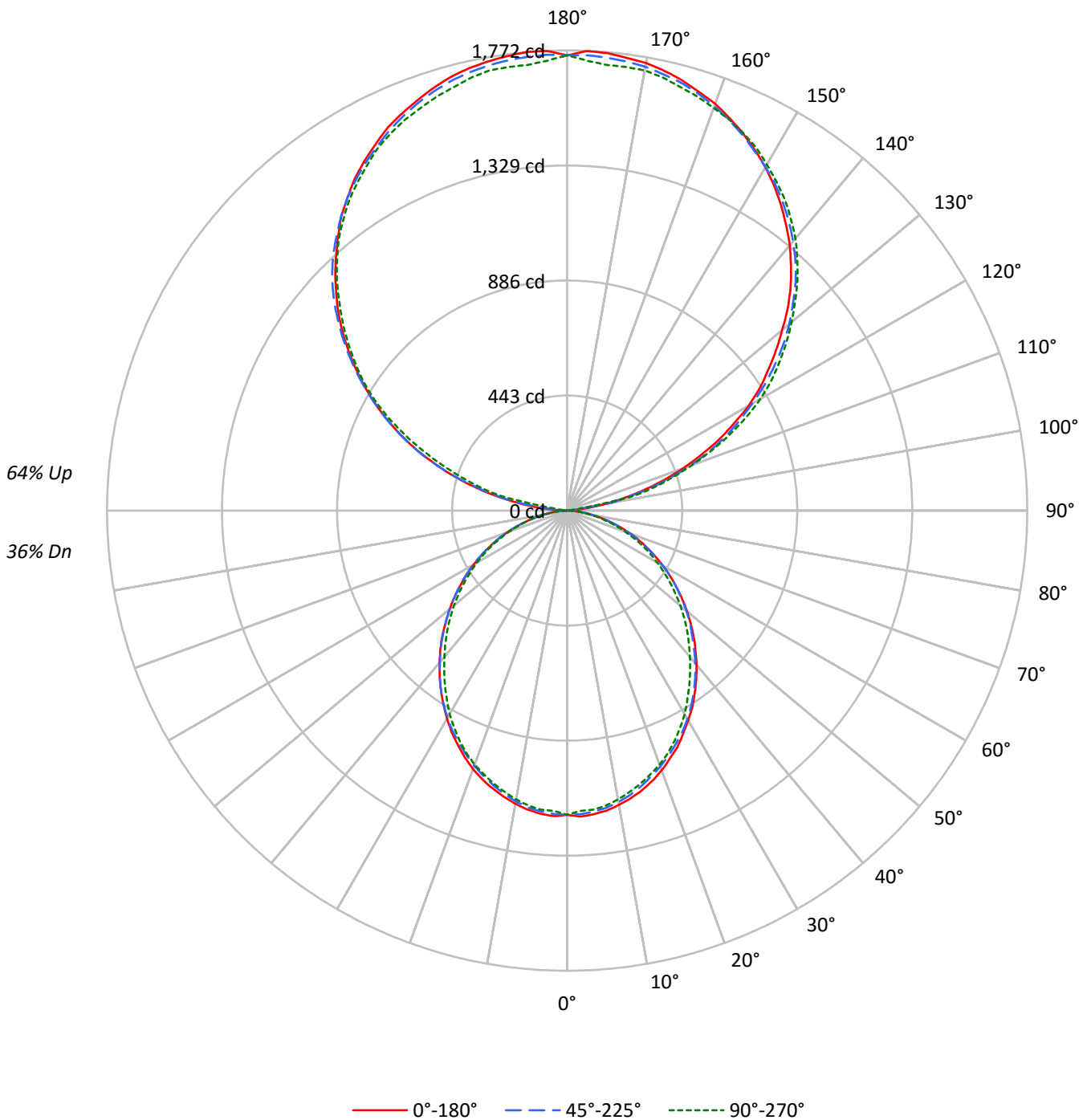
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8180.6 lumens  
Efficiency: N/A  
Efficacy: 124.9 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 (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	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°	7412	7412	7412
5°	7394	6804	7381
10°	7275	6261	7248
15°	7127	5747	7081
20°	6932	5280	6899
25°	6724	4812	6666
30°	6466	4350	6416
35°	6217	3886	6145
40°	5943	3461	5860
45°	5652	3073	5570
50°	5343	2700	5241
55°	5013	2336	4894
60°	4657	1978	4531
65°	4269	1634	4116
70°	3812	1268	3632
75°	3199	901	2976
80°	2422	560	2216
85°	1448	244	1268



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.2	1.3
10°-20°	309.3	3.8
20°-30°	454.4	5.6
30°-40°	524.8	6.4
40°-50°	520.2	6.4
50°-60°	451.2	5.5
60°-70°	329.5	4.0
70°-80°	180.1	2.2
80°-90°	46.8	0.6
90°-100°	55.5	0.7
100°-110°	372.3	4.6
110°-120°	682.9	8.3
120°-130°	885.4	10.8
130°-140°	962.0	11.8
140°-150°	909.2	11.1
150°-160°	739.7	9.0
160°-170°	481.0	5.9
170°-180°	166.3	2.0
0°-30°	873.8	10.7
0°-40°	1398.5	17.1
0°-60°	2369.8	29.0
0°-90°	2926.2	35.8
90°-120°	1110.8	13.6
90°-150°	3867.4	47.3
90°-180°	5254.0	64.2
0°-180°	8180.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1172	1172	1172	1172	1172	
5°	1174	1164	1156	1163	1172	111
15°	1115	1099	1089	1096	1108	314
25°	1004	991	979	987	996	462
35°	857	850	820	847	847	536
45°	690	680	652	677	680	532
55°	514	513	484	504	502	460
65°	341	338	320	330	329	338
75°	176	174	161	164	164	187
85°	41	43	38	38	36	46
90°	1	3	1	2	1	4
95°	37	11	12	18	86	55
105°	306	324	347	383	391	325
115°	643	670	690	724	720	634
125°	946	976	998	1018	1012	846
135°	1217	1245	1254	1280	1262	937
145°	1436	1448	1462	1473	1473	898
155°	1602	1597	1604	1616	1630	739
165°	1715	1704	1688	1715	1729	484
175°	1768	1751	1723	1754	1772	168
180°	1753	1753	1753	1753	1753	



TEST NUMBER: P199542

CATALOG NUMBER: S125-DIW-U2-1-40-0048-1D-UDD-1-NA-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1171.6	1171.6	1171.6	1171.6	1171.6	1171.6	1171.6	1171.6	1171.6
2.5°	1179.4	1167.3	1170.1	1168.0	1157.9	1166.5	1169.4	1165.1	1178.0
5°	1173.7	1161.5	1164.4	1161.5	1155.8	1160.1	1163.0	1158.6	1171.6
7.5°	1165.1	1152.2	1154.3	1151.5	1145.7	1149.3	1152.9	1148.6	1161.5
10°	1150.8	1138.6	1139.3	1135.7	1129.3	1133.6	1137.1	1133.6	1146.5
12.5°	1134.3	1121.4	1121.4	1115.6	1109.9	1113.5	1118.5	1115.6	1128.5
15°	1114.9	1101.3	1099.1	1095.6	1089.1	1093.4	1095.6	1094.8	1107.7
17.5°	1091.3	1076.9	1074.0	1073.3	1065.4	1071.2	1071.9	1069.7	1085.5
20°	1064.0	1050.4	1048.2	1047.5	1041.1	1045.4	1045.4	1042.5	1059.0
22.5°	1033.9	1021.0	1020.3	1018.8	1011.7	1016.7	1016.7	1012.4	1028.9
25°	1004.5	988.7	990.9	987.3	978.7	985.9	986.6	979.4	995.9
27.5°	967.9	955.7	960.0	953.6	942.1	951.4	955.7	945.0	962.2
30°	932.1	919.2	926.3	914.9	904.8	913.4	921.3	907.7	924.9
32.5°	896.9	881.9	890.5	876.2	861.8	872.6	885.5	872.6	886.2
35°	856.8	844.6	849.6	834.6	820.2	831.0	846.8	834.6	846.8
37.5°	816.6	806.6	810.2	792.3	777.9	788.7	805.2	795.9	806.6
40°	775.1	767.9	767.9	750.0	735.6	745.7	762.9	757.9	764.3
42.5°	732.0	729.2	723.4	707.7	694.0	704.1	720.6	719.1	722.0
45°	689.7	689.7	680.4	663.9	652.5	661.8	676.8	680.4	679.7
47.5°	646.0	649.6	641.7	623.8	610.9	620.2	633.8	640.3	633.1
50°	602.3	608.7	598.7	582.9	568.6	578.6	590.1	598.7	590.8
52.5°	558.5	566.4	555.7	540.6	526.3	535.6	547.1	557.1	547.1
55°	514.1	523.4	513.4	497.6	484.0	492.6	504.0	514.1	501.9
57.5°	470.3	478.9	470.3	454.6	441.7	449.5	461.7	469.6	458.9
60°	426.6	435.9	427.3	412.3	400.1	406.5	418.0	425.9	415.1
62.5°	383.6	391.5	382.2	370.0	360.6	363.5	374.3	383.6	372.1
65°	341.3	348.5	338.4	327.7	319.8	321.2	330.5	335.5	329.1
67.5°	299.7	307.6	296.8	286.8	277.5	280.3	288.2	295.4	287.5
70°	258.1	266.0	254.5	245.9	238.0	239.5	245.9	253.8	245.9
72.5°	217.2	223.7	215.8	205.8	200.0	201.5	205.1	212.2	204.3
75°	175.7	182.8	174.2	166.3	160.6	162.0	164.2	169.9	163.5
77.5°	136.9	142.0	136.2	129.8	126.2	126.9	127.6	131.9	126.2
80°	101.1	105.4	101.8	96.8	93.9	93.9	93.9	97.5	92.5
82.5°	68.8	73.1	70.3	66.7	64.5	62.4	63.8	66.7	62.4
85°	40.9	44.5	43.0	39.4	38.0	36.6	38.0	39.4	35.8
87.5°	18.6	21.5	19.4	15.8	14.3	12.9	12.9	15.1	12.2
90°	1.4	3.6	2.9	2.2	1.4	1.4	2.2	2.9	1.4
92.5°	5.2	7.2	7.2	8.3	8.3	9.3	10.3	12.4	35.1
95°	37.2	41.3	11.4	12.4	12.4	13.4	17.5	100.1	85.7
97.5°	85.7	109.4	36.1	21.7	19.6	28.9	111.5	159.0	150.7
100°	152.8	170.3	172.4	112.5	76.4	157.9	219.9	237.4	226.1
102.5°	226.1	245.7	240.5	261.2	268.4	291.1	296.3	319.0	309.7
105°	305.6	327.2	324.1	344.8	346.8	372.7	383.0	396.4	391.2
107.5°	389.2	404.7	412.9	426.3	425.3	453.2	473.8	480.0	474.8
110°	474.8	485.2	500.7	509.9	509.9	537.8	561.6	562.6	557.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	556.4	573.9	588.4	599.8	597.7	627.6	644.1	647.2	641.0
115°	643.1	650.3	669.9	686.5	689.6	712.3	723.6	726.7	720.5
117.5°	722.6	734.0	746.3	766.0	776.3	790.7	799.0	804.1	798.0
120°	807.2	814.5	821.7	840.3	858.9	867.1	873.3	877.4	872.3
122.5°	880.5	885.7	901.2	913.6	932.1	938.3	947.6	946.6	942.5
125°	945.6	952.8	975.5	982.7	998.2	1006.5	1017.8	1011.6	1011.6
127.5°	1013.7	1019.9	1048.8	1049.8	1064.3	1073.6	1088.0	1077.7	1078.7
130°	1080.8	1091.1	1116.9	1116.9	1128.3	1138.6	1155.1	1139.6	1143.8
132.5°	1152.0	1155.1	1178.9	1179.9	1190.2	1200.5	1220.2	1199.5	1203.6
135°	1217.1	1214.0	1244.9	1239.8	1254.2	1260.4	1280.0	1255.3	1262.5
137.5°	1275.9	1268.7	1301.7	1296.5	1312.0	1313.1	1333.7	1310.0	1318.2
140°	1333.7	1325.4	1353.3	1350.2	1367.8	1365.7	1381.2	1361.6	1372.9
142.5°	1385.3	1376.0	1402.9	1401.8	1415.3	1415.3	1428.7	1412.2	1428.7
145°	1435.9	1423.5	1448.3	1447.3	1461.7	1460.7	1473.1	1457.6	1473.1
147.5°	1483.4	1471.0	1490.6	1488.5	1500.9	1502.0	1512.3	1503.0	1519.5
150°	1526.7	1515.4	1527.8	1526.7	1538.1	1539.1	1549.5	1545.3	1557.7
152.5°	1566.0	1555.6	1561.8	1559.8	1576.3	1570.1	1582.5	1580.4	1593.8
155°	1602.1	1591.8	1596.9	1592.8	1604.2	1603.1	1616.5	1614.5	1630.0
157.5°	1635.1	1623.8	1627.9	1621.7	1630.0	1630.0	1645.5	1645.5	1656.8
160°	1667.1	1651.6	1656.8	1646.5	1649.6	1653.7	1672.3	1672.3	1682.6
162.5°	1689.8	1679.5	1682.6	1668.2	1671.3	1673.3	1695.0	1695.0	1707.4
165°	1714.6	1701.2	1704.3	1686.7	1687.8	1692.9	1714.6	1715.6	1729.1
167.5°	1734.2	1720.8	1719.8	1702.2	1707.4	1708.4	1729.1	1730.1	1744.6
170°	1749.7	1735.3	1735.3	1716.7	1720.8	1718.7	1740.4	1743.5	1755.9
172.5°	1758.0	1747.6	1744.6	1723.9	1722.9	1726.0	1748.7	1752.8	1765.2
175°	1768.3	1755.9	1750.7	1731.1	1722.9	1733.2	1753.8	1758.0	1772.4
177.5°	1771.4	1759.0	1754.9	1734.2	1734.2	1736.3	1756.9	1760.0	1771.4
180°	1752.8	1752.8	1752.8	1752.8	1752.8	1752.8	1752.8	1752.8	1752.8

(END OF REPORT)