

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: P199544

Luminaire Tested: **S125-DIP-U2-2-30-X-X0048-1D-UDD-1-NA-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199544  
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-DIP-U2-2-30-X-X0048-1D-UDD-1-NA-W  
Description: DEFINE 5-INCH DIRECT/INDIRECT PENDANT LED LUMINAIRE  
UPLIGHT LL2-3000K, NO LENS  
DOWNLIGHT LL2-3000K, SATIN WHITE DIFFUSER  
Light Source: -  
757G  
Ballast/Driver: ELECTRONIC DRIVERS

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8990.2 lumens  
Efficiency: N/A  
Efficacy: 111.7 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

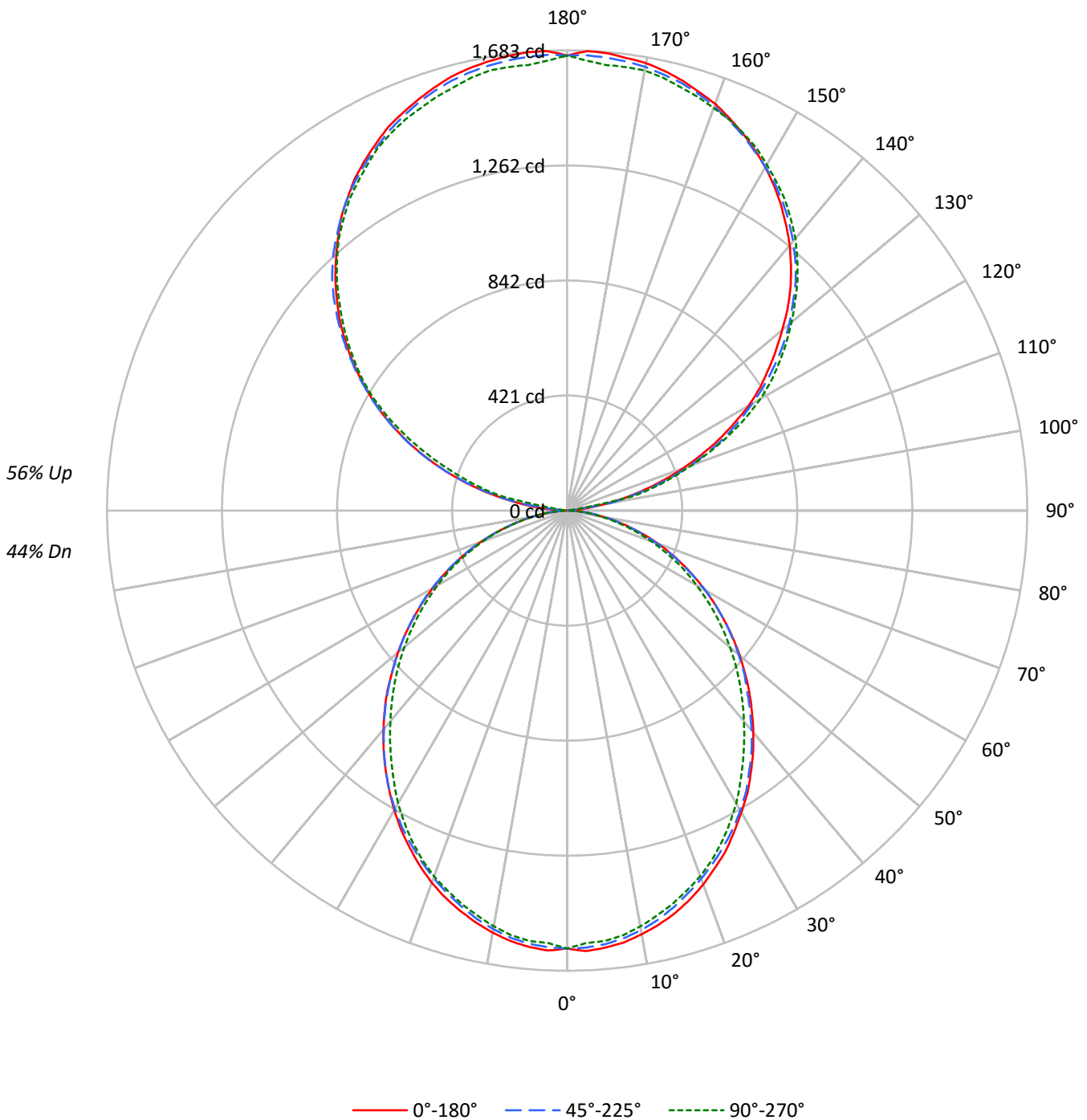
Input Watts (W): 80.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	97	92	89	85	88	85	81	79	70	68	66	57	56	54	45	44	43	38
2	88	81	75	70	80	74	69	64	62	58	55	50	48	45	40	38	36	32
3	80	71	64	58	73	65	59	54	55	50	46	45	41	38	35	33	31	27
4	73	63	55	49	67	58	51	46	48	43	39	40	36	33	32	29	27	23
5	67	56	48	42	62	52	45	39	43	38	34	36	32	29	29	26	23	20
6	62	50	42	36	57	46	39	34	39	34	30	32	28	25	26	23	21	18
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	24	21	18	16
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	16	14
9	50	37	30	25	45	35	28	24	30	24	21	25	21	18	20	17	15	13
10	46	34	27	22	42	32	25	21	27	22	19	23	19	16	19	16	13	12

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

	0°	90°	180°
0°	10133	10133	10133
5°	10109	9302	10091
10°	9946	8560	9909
15°	9744	7858	9681
20°	9477	7218	9432
25°	9193	6579	9114
30°	8840	5947	8772
35°	8500	5313	8400
40°	8125	4732	8012
45°	7727	4200	7615
50°	7305	3691	7165
55°	6853	3194	6691
60°	6367	2705	6196
65°	5836	2234	5627
70°	5213	1733	4966
75°	4373	1231	4069
80°	3311	766	3028
85°	1980	334	1735



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.6	1.7
10°-20°	422.8	4.7
20°-30°	621.2	6.9
30°-40°	717.4	8.0
40°-50°	711.1	7.9
50°-60°	616.8	6.9
60°-70°	450.5	5.0
70°-80°	246.2	2.7
80°-90°	64.0	0.7
90°-100°	52.9	0.6
100°-110°	353.5	3.9
110°-120°	648.5	7.2
120°-130°	840.8	9.4
130°-140°	913.5	10.2
140°-150°	863.4	9.6
150°-160°	702.4	7.8
160°-170°	456.7	5.1
170°-180°	157.9	1.8
0°-30°	1194.6	13.3
0°-40°	1912.0	21.3
0°-60°	3239.9	36.0
0°-90°	4000.6	44.5
90°-120°	1054.9	11.7
90°-150°	3672.5	40.9
90°-180°	4990.0	55.5
0°-180°	8990.2	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1602	1602	1602	1602	1602	
5°	1605	1592	1580	1590	1602	152
15°	1524	1503	1489	1498	1514	429
25°	1373	1355	1338	1349	1362	631
35°	1171	1162	1121	1158	1158	733
45°	943	930	892	925	929	727
55°	703	702	662	689	686	629
65°	467	463	437	452	450	462
75°	240	238	220	224	224	256
85°	56	59	52	52	49	63
90°	2	4	2	3	2	5
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1601.7	1601.7	1601.7	1601.7	1601.7	1601.7	1601.7	1601.7	1601.7
2.5°	1612.5	1595.8	1599.7	1596.8	1583.1	1594.8	1598.7	1592.9	1610.5
5°	1604.6	1588.0	1591.9	1588.0	1580.1	1586.0	1589.9	1584.0	1601.7
7.5°	1592.9	1575.2	1578.2	1574.2	1566.4	1571.3	1576.2	1570.3	1588.0
10°	1573.3	1556.6	1557.6	1552.7	1543.9	1549.7	1554.6	1549.7	1567.4
12.5°	1550.7	1533.1	1533.1	1525.2	1517.4	1522.3	1529.2	1525.2	1542.9
15°	1524.3	1505.6	1502.7	1497.8	1489.0	1494.8	1497.8	1496.8	1514.4
17.5°	1491.9	1472.3	1468.4	1467.4	1456.6	1464.5	1465.4	1462.5	1484.1
20°	1454.7	1436.0	1433.1	1432.1	1423.3	1429.2	1429.2	1425.2	1447.8
22.5°	1413.5	1395.8	1394.9	1392.9	1383.1	1390.0	1390.0	1384.1	1406.6
25°	1373.3	1351.7	1354.7	1349.8	1338.0	1347.8	1348.8	1339.0	1361.5
27.5°	1323.3	1306.6	1312.5	1303.7	1288.0	1300.8	1306.6	1291.9	1315.5
30°	1274.3	1256.7	1266.5	1250.8	1237.0	1248.8	1259.6	1241.0	1264.5
32.5°	1226.3	1205.7	1217.4	1197.8	1178.2	1192.9	1210.6	1192.9	1211.6
35°	1171.4	1154.7	1161.6	1141.0	1121.4	1136.1	1157.6	1141.0	1157.6
37.5°	1116.5	1102.8	1107.7	1083.2	1063.5	1078.2	1100.8	1088.1	1102.8
40°	1059.6	1049.8	1049.8	1025.3	1005.7	1019.4	1043.0	1036.1	1044.9
42.5°	1000.8	996.9	989.0	967.5	948.9	962.6	985.1	983.2	987.1
45°	943.0	943.0	930.2	907.7	892.0	904.7	925.3	930.2	929.3
47.5°	883.2	888.1	877.3	852.8	835.2	847.9	866.5	875.3	865.5
50°	823.4	832.2	818.5	796.9	777.3	791.0	806.7	818.5	807.7
52.5°	763.6	774.4	759.7	739.1	719.5	732.2	747.9	761.6	747.9
55°	702.8	715.6	701.8	680.3	661.7	673.4	689.1	702.8	686.2
57.5°	643.0	654.8	643.0	621.5	603.8	614.6	631.3	642.0	627.3
60°	583.2	596.0	584.2	563.6	547.0	555.8	571.5	582.3	567.6
62.5°	524.4	535.2	522.5	505.8	493.1	497.0	511.7	524.4	508.7
65°	466.6	476.4	462.7	448.0	437.2	439.1	451.9	458.7	449.9
67.5°	409.7	420.5	405.8	392.1	379.3	383.3	394.1	403.9	393.1
70°	352.9	363.7	348.0	336.2	325.4	327.4	336.2	347.0	336.2
72.5°	297.0	305.8	295.0	281.3	273.5	275.4	280.3	290.1	279.4
75°	240.2	250.0	238.2	227.4	219.6	221.5	224.5	232.3	223.5
77.5°	187.2	194.1	186.2	177.4	172.5	173.5	174.5	180.4	172.5
80°	138.2	144.1	139.2	132.3	128.4	128.4	128.4	133.3	126.4
82.5°	94.1	100.0	96.1	91.2	88.2	85.3	87.2	91.2	85.3
85°	55.9	60.8	58.8	53.9	52.0	50.0	52.0	53.9	49.0
87.5°	25.5	29.4	26.5	21.6	19.6	17.6	17.6	20.6	16.7
90°	2.0	4.9	3.9	2.9	2.0	2.0	2.9	3.9	2.0
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)