

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: P199550

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199550  
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-LO-30-0048-1D-UDD-1-NA-W  
Description: DEFINE 5-INCH DIRECT/INDIRECT WALL LED LUMINAIRE  
UPLIGHT LL2-3000K, NO LENS  
DOWNLIGHT LLO-3000K, SATIN WHITE DIFFUSER  
Light Source: -  
757G  
Ballast/Driver: ELECTRONIC DRIVERS

**Summary**

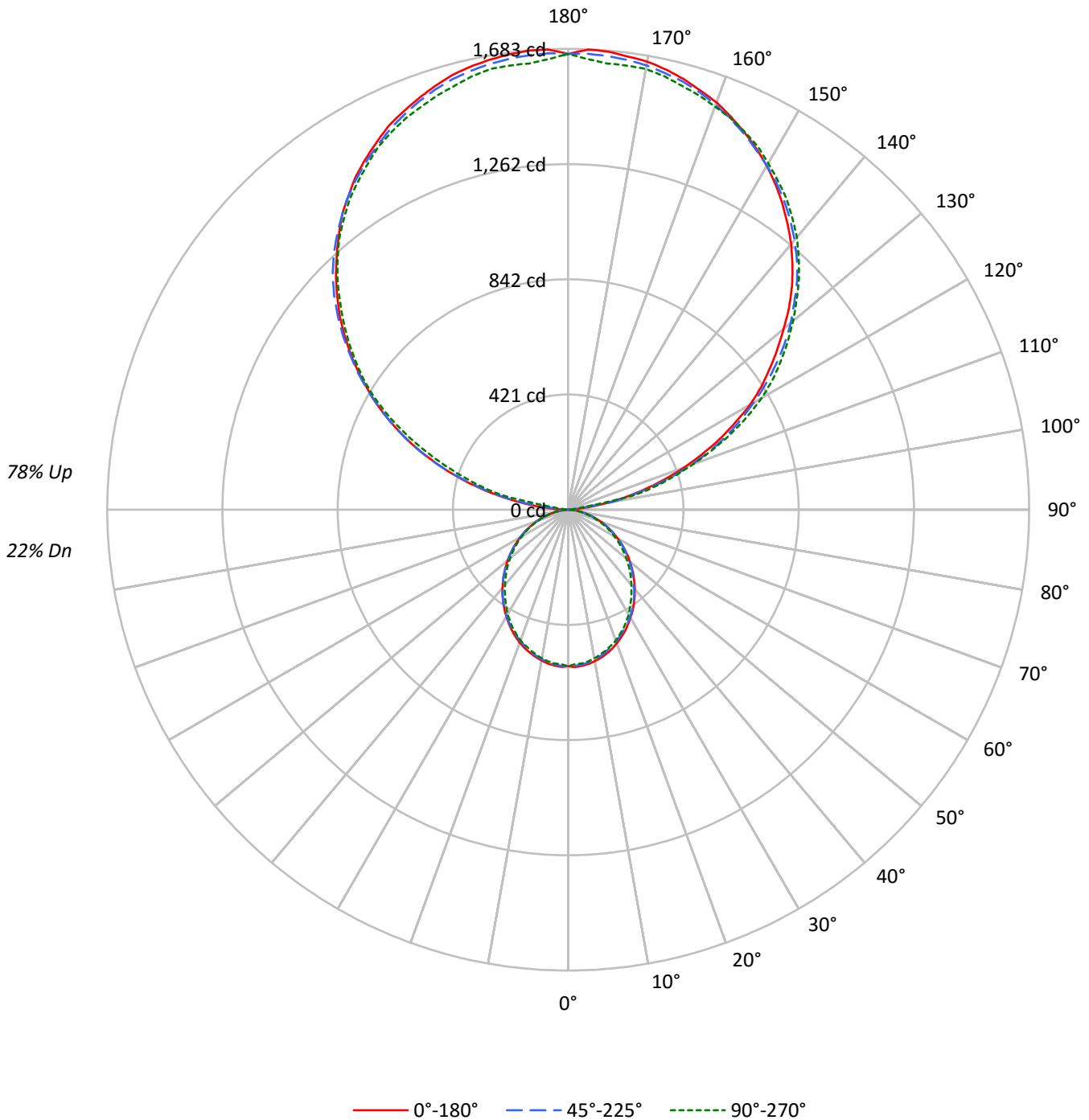
Lumens per Lamp: N/A  
Luminaire Lumens: 6417.1 lumens  
Efficiency: N/A  
Efficacy: 122.7 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.16 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4.08' x H: 0.38')  
CIE Type: Semi-Indirect

Input Watts (W): 52.3  
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	101	101	101	101	89	89	89	89	68	68	68	48	48	48	31	31	31	22
1	92	87	84	80	81	78	75	72	59	57	56	43	41	40	27	26	26	19
2	83	76	71	66	74	68	63	59	52	49	46	37	35	34	24	23	22	16
3	76	67	60	55	67	60	54	49	46	42	39	33	31	28	21	20	19	13
4	69	59	52	46	61	53	46	42	41	36	33	29	27	24	19	17	16	12
5	64	53	45	39	56	47	40	35	36	32	28	26	23	21	17	15	14	10
6	58	47	39	34	52	42	35	31	33	28	24	24	21	18	15	14	12	9
7	54	42	35	29	48	38	31	27	29	25	21	21	18	16	14	12	11	8
8	50	38	31	26	44	34	28	23	27	22	19	20	16	14	13	11	10	7
9	46	35	28	23	41	31	25	21	24	20	17	18	15	13	12	10	9	6
10	43	32	25	20	38	28	22	18	22	18	15	16	13	11	11	9	8	6

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

	0°	90°	180°
0°	3616	3616	3616
5°	3608	3320	3601
10°	3550	3055	3536
15°	3477	2804	3455
20°	3382	2576	3366
25°	3281	2348	3253
30°	3155	2122	3131
35°	3034	1896	2998
40°	2900	1689	2859
45°	2757	1499	2718
50°	2607	1317	2558
55°	2446	1140	2388
60°	2273	965	2212
65°	2082	797	2009
70°	1860	618	1772
75°	1560	440	1453
80°	1181	273	1080
85°	705	119	620



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.7	0.8
10°-20°	150.9	2.4
20°-30°	221.7	3.5
30°-40°	256.1	4.0
40°-50°	253.8	4.0
50°-60°	220.1	3.4
60°-70°	160.8	2.5
70°-80°	87.9	1.4
80°-90°	22.8	0.4
90°-100°	52.6	0.8
100°-110°	353.5	5.5
110°-120°	648.5	10.1
120°-130°	840.8	13.1
130°-140°	913.5	14.2
140°-150°	863.4	13.5
150°-160°	702.4	10.9
160°-170°	456.7	7.1
170°-180°	157.9	2.5
0°-30°	426.3	6.6
0°-40°	682.4	10.6
0°-60°	1156.3	18.0
0°-90°	1427.8	22.2
90°-120°	1054.6	16.4
90°-150°	3672.3	57.2
90°-180°	4989.0	77.7
0°-180°	6417.1	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	572	572	572	572	572	
5°	573	568	564	567	572	54
15°	544	536	531	535	540	153
25°	490	484	478	481	486	225
35°	418	415	400	413	413	261
45°	336	332	318	330	332	260
55°	251	250	236	246	245	224
65°	166	165	156	161	161	165
75°	86	85	78	80	80	91
85°	20	21	18	18	18	22
90°	1	1	1	1	1	2
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°	571.6	571.6	571.6	571.6	571.6	571.6	571.6	571.6	571.6
2.5°	575.5	569.5	570.9	569.9	565.0	569.2	570.6	568.5	574.8
5°	572.7	566.7	568.1	566.7	563.9	566.0	567.4	565.3	571.6
7.5°	568.5	562.2	563.2	561.8	559.0	560.8	562.5	560.4	566.7
10°	561.5	555.5	555.9	554.2	551.0	553.1	554.9	553.1	559.4
12.5°	553.5	547.2	547.2	544.4	541.6	543.3	545.8	544.4	550.7
15°	544.0	537.4	536.3	534.6	531.4	533.5	534.6	534.2	540.5
17.5°	532.5	525.5	524.1	523.7	519.9	522.7	523.0	522.0	529.7
20°	519.2	512.5	511.5	511.1	508.0	510.1	510.1	508.7	516.7
22.5°	504.5	498.2	497.8	497.1	493.6	496.1	496.1	494.0	502.0
25°	490.1	482.4	483.5	481.7	477.5	481.0	481.4	477.9	485.9
27.5°	472.3	466.3	468.4	465.3	459.7	464.2	466.3	461.1	469.5
30°	454.8	448.5	452.0	446.4	441.5	445.7	449.5	442.9	451.3
32.5°	437.7	430.3	434.5	427.5	420.5	425.8	432.1	425.8	432.4
35°	418.1	412.1	414.6	407.2	400.2	405.5	413.2	407.2	413.2
37.5°	398.5	393.6	395.3	386.6	379.6	384.8	392.9	388.3	393.6
40°	378.2	374.7	374.7	365.9	358.9	363.8	372.2	369.8	372.9
42.5°	357.2	355.8	353.0	345.3	338.6	343.5	351.6	350.9	352.3
45°	336.5	336.5	332.0	324.0	318.4	322.9	330.3	332.0	331.7
47.5°	315.2	317.0	313.1	304.4	298.1	302.6	309.3	312.4	308.9
50°	293.9	297.0	292.1	284.4	277.4	282.3	287.9	292.1	288.3
52.5°	272.5	276.4	271.1	263.8	256.8	261.3	266.9	271.8	266.9
55°	250.8	255.4	250.5	242.8	236.1	240.3	245.9	250.8	244.9
57.5°	229.5	233.7	229.5	221.8	215.5	219.4	225.3	229.1	223.9
60°	208.2	212.7	208.5	201.2	195.2	198.4	204.0	207.8	202.6
62.5°	187.2	191.0	186.5	180.5	176.0	177.4	182.6	187.2	181.6
65°	166.5	170.0	165.1	159.9	156.0	156.7	161.3	163.7	160.6
67.5°	146.2	150.1	144.8	139.9	135.4	136.8	140.6	144.1	140.3
70°	125.9	129.8	124.2	120.0	116.1	116.8	120.0	123.8	120.0
72.5°	106.0	109.2	105.3	100.4	97.6	98.3	100.1	103.6	99.7
75°	85.7	89.2	85.0	81.2	78.4	79.1	80.1	82.9	79.8
77.5°	66.8	69.3	66.5	63.3	61.6	61.9	62.3	64.4	61.6
80°	49.3	51.4	49.7	47.2	45.8	45.8	45.8	47.6	45.1
82.5°	33.6	35.7	34.3	32.5	31.5	30.4	31.1	32.5	30.4
85°	19.9	21.7	21.0	19.2	18.5	17.8	18.5	19.2	17.5
87.5°	9.1	10.5	9.4	7.7	7.0	6.3	6.3	7.3	5.9
90°	0.7	1.7	1.4	1.0	0.7	0.7	1.0	1.4	0.7
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)