

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: P199563

Luminaire Tested: **S125-DIW-ULO-2-35-0048-1D-UDD-1-5-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199563  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P27900 P27900)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125-DIW-ULO-2-35-0048-1D-UDD-1-5-W  
Description: DEFINE 5-INCH DIRECT/INDIRECT WALL LED LUMINAIRE  
UPLIGHT LLO-3500K, SATIN WHITE DIFFUSER  
DOWNLIGHT LL2-3500K, SATIN WHITE DIFFUSER  
Light Source: -  
757G  
Ballast/Driver: ELECTRONIC DRIVERS

**Summary**

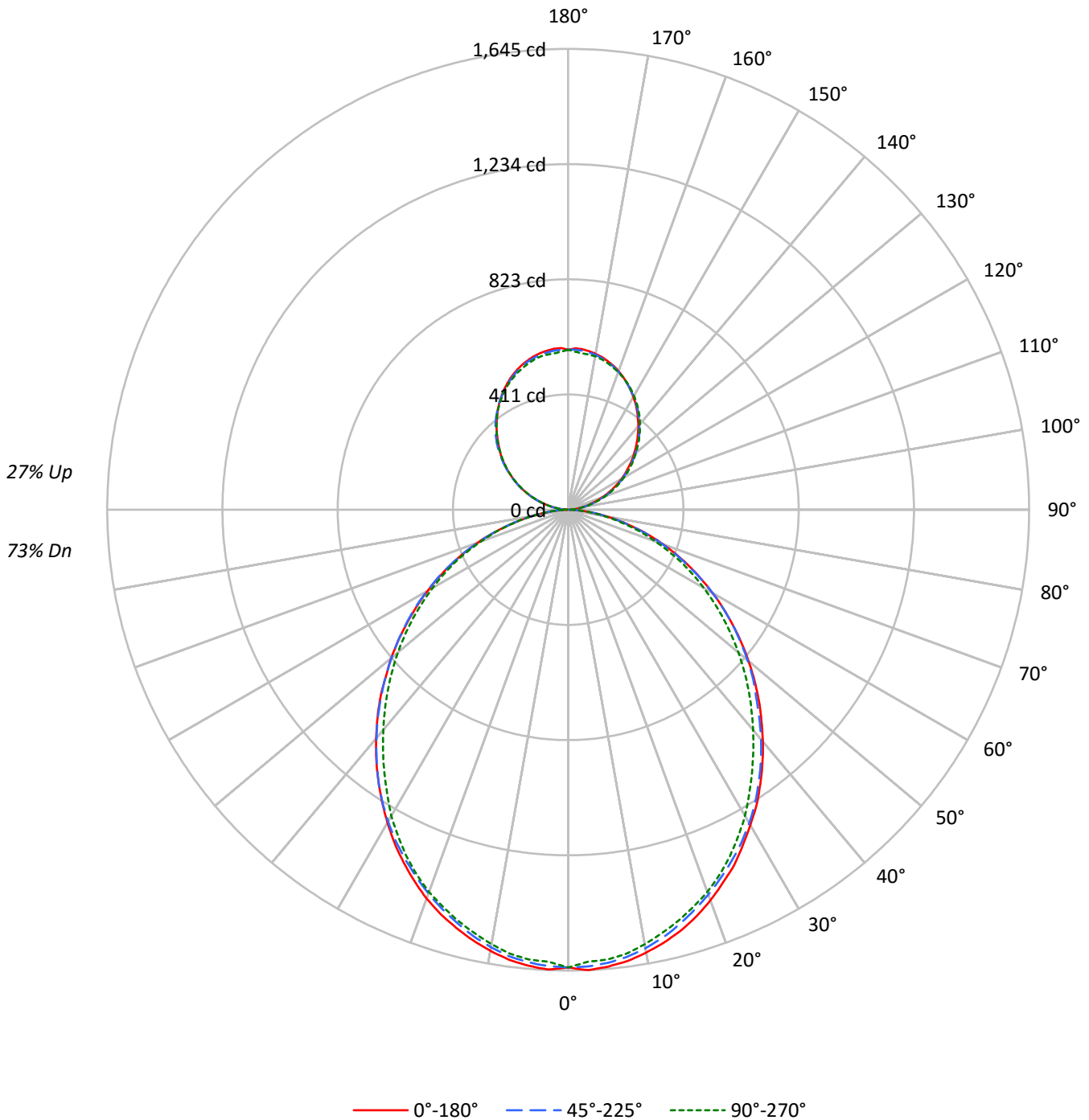
Lumens per Lamp: N/A  
Luminaire Lumens: 5619.8 lumens  
Efficiency: N/A  
Efficacy: 102.0 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.16 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4.08' x H: 0.38')  
CIE Type: Semi-Direct

Input Watts (W): 55.1  
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	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77	73
1	103	99	95	91	98	94	90	87	84	82	79	76	74	72	68	67	65	61
2	94	86	80	75	89	82	76	72	74	70	66	67	63	60	60	57	55	52
3	86	76	68	62	81	72	65	60	65	60	55	59	55	51	53	50	47	44
4	79	67	59	53	74	64	57	51	58	52	47	53	48	44	48	44	41	38
5	72	60	52	46	68	57	50	44	52	46	41	48	42	38	43	39	35	33
6	67	54	46	40	63	52	44	38	47	41	36	43	38	34	39	35	31	29
7	62	49	41	35	58	47	39	34	43	37	32	39	34	30	36	31	28	26
8	57	45	37	31	54	43	35	30	39	33	28	36	31	27	33	28	25	23
9	54	41	33	28	51	39	32	27	36	30	26	33	28	24	30	26	23	21
10	50	38	30	25	48	36	29	25	33	27	23	31	26	22	28	24	21	19

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

	0°	90°	180°
0°	10338	10338	10338
5°	10313	9490	10294
10°	10146	8732	10108
15°	9940	8016	9876
20°	9668	7364	9622
25°	9378	6712	9298
30°	9019	6067	8949
35°	8672	5420	8570
40°	8289	4828	8174
45°	7883	4285	7768
50°	7452	3766	7310
55°	6991	3258	6826
60°	6495	2759	6321
65°	5953	2279	5741
70°	5317	1768	5066
75°	4460	1256	4151
80°	3378	782	3090
85°	2019	341	1771



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.6	2.7
10°-20°	431.3	7.7
20°-30°	633.7	11.3
30°-40°	731.9	13.0
40°-50°	725.5	12.9
50°-60°	629.2	11.2
60°-70°	459.6	8.2
70°-80°	251.1	4.5
80°-90°	65.3	1.2
90°-100°	28.6	0.5
100°-110°	102.3	1.8
110°-120°	182.0	3.2
120°-130°	242.6	4.3
130°-140°	274.5	4.9
140°-150°	271.2	4.8
150°-160°	229.6	4.1
160°-170°	153.8	2.7
170°-180°	54.0	1.0
0°-30°	1218.7	21.7
0°-40°	1950.6	34.7
0°-60°	3305.3	58.8
0°-90°	4081.3	72.6
90°-120°	312.8	5.6
90°-150°	1101.1	19.6
90°-180°	1538.0	27.4
0°-180°	5619.8	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1634	1634	1634	1634	1634	
5°	1637	1624	1612	1622	1634	155
15°	1555	1533	1519	1528	1545	438
25°	1401	1382	1365	1376	1389	644
35°	1195	1185	1144	1181	1181	747
45°	962	949	910	944	948	742
55°	717	716	675	703	700	641
65°	476	472	446	461	459	472
75°	245	243	224	229	228	261
85°	57	60	53	53	50	64
90°	2	4	2	3	2	5
95°	20	23	26	27	25	22
105°	87	94	97	101	99	93
115°	174	182	184	188	187	173
125°	262	269	273	277	274	235
135°	348	356	357	364	356	268
145°	428	433	436	439	438	268
155°	498	497	499	502	505	229
165°	549	546	542	549	553	155
175°	575	570	560	570	577	55
180°	571	571	571	571	571	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1634.0	1634.0	1634.0	1634.0	1634.0	1634.0	1634.0	1634.0	1634.0
2.5°	1645.0	1628.0	1632.0	1629.0	1615.0	1627.0	1631.0	1625.0	1643.0
5°	1637.0	1620.0	1624.0	1620.0	1612.0	1618.0	1622.0	1616.0	1634.0
7.5°	1625.0	1607.0	1610.0	1606.0	1598.0	1603.0	1608.0	1602.0	1620.0
10°	1605.0	1588.0	1589.0	1584.0	1575.0	1581.0	1586.0	1581.0	1599.0
12.5°	1582.0	1564.0	1564.0	1556.0	1548.0	1553.0	1560.0	1556.0	1574.0
15°	1555.0	1536.0	1533.0	1528.0	1519.0	1525.0	1528.0	1527.0	1545.0
17.5°	1522.0	1502.0	1498.0	1497.0	1486.0	1494.0	1495.0	1492.0	1514.0
20°	1484.0	1465.0	1462.0	1461.0	1452.0	1458.0	1458.0	1454.0	1477.0
22.5°	1442.0	1424.0	1423.0	1421.0	1411.0	1418.0	1418.0	1412.0	1435.0
25°	1401.0	1379.0	1382.0	1377.0	1365.0	1375.0	1376.0	1366.0	1389.0
27.5°	1350.0	1333.0	1339.0	1330.0	1314.0	1327.0	1333.0	1318.0	1342.0
30°	1300.0	1282.0	1292.0	1276.0	1262.0	1274.0	1285.0	1266.0	1290.0
32.5°	1251.0	1230.0	1242.0	1222.0	1202.0	1217.0	1235.0	1217.0	1236.0
35°	1195.0	1178.0	1185.0	1164.0	1144.0	1159.0	1181.0	1164.0	1181.0
37.5°	1139.0	1125.0	1130.0	1105.0	1085.0	1100.0	1123.0	1110.0	1125.0
40°	1081.0	1071.0	1071.0	1046.0	1026.0	1040.0	1064.0	1057.0	1066.0
42.5°	1021.0	1017.0	1009.0	987.0	968.0	982.0	1005.0	1003.0	1007.0
45°	962.0	962.0	949.0	926.0	910.0	923.0	944.0	949.0	948.0
47.5°	901.0	906.0	895.0	870.0	852.0	865.0	884.0	893.0	883.0
50°	840.0	849.0	835.0	813.0	793.0	807.0	823.0	835.0	824.0
52.5°	779.0	790.0	775.0	754.0	734.0	747.0	763.0	777.0	763.0
55°	717.0	730.0	716.0	694.0	675.0	687.0	703.0	717.0	700.0
57.5°	656.0	668.0	656.0	634.0	616.0	627.0	644.0	655.0	640.0
60°	595.0	608.0	596.0	575.0	558.0	567.0	583.0	594.0	579.0
62.5°	535.0	546.0	533.0	516.0	503.0	507.0	522.0	535.0	519.0
65°	476.0	486.0	472.0	457.0	446.0	448.0	461.0	468.0	459.0
67.5°	418.0	429.0	414.0	400.0	387.0	391.0	402.0	412.0	401.0
70°	360.0	371.0	355.0	343.0	332.0	334.0	343.0	354.0	343.0
72.5°	303.0	312.0	301.0	287.0	279.0	281.0	286.0	296.0	285.0
75°	245.0	255.0	243.0	232.0	224.0	226.0	229.0	237.0	228.0
77.5°	191.0	198.0	190.0	181.0	176.0	177.0	178.0	184.0	176.0
80°	141.0	147.0	142.0	135.0	131.0	131.0	131.0	136.0	129.0
82.5°	96.0	102.0	98.0	93.0	90.0	87.0	89.0	93.0	87.0
85°	57.0	62.0	60.0	55.0	53.0	51.0	53.0	55.0	50.0
87.5°	26.0	30.0	27.0	22.0	20.0	18.0	18.0	21.0	17.0
90°	2.0	5.0	4.0	3.0	2.0	2.0	3.0	4.0	2.0
92.5°	6.8	9.3	9.3	8.2	10.0	11.4	13.9	13.9	12.1
95°	19.6	22.1	23.2	23.9	25.7	26.4	27.1	27.1	25.0
97.5°	33.5	37.1	37.8	38.9	41.0	41.4	42.5	42.8	40.3
100°	49.3	53.5	54.2	55.7	58.2	58.5	60.0	60.7	58.2
102.5°	67.1	72.1	73.2	74.2	76.0	77.4	79.2	80.3	77.4
105°	86.7	92.8	93.5	94.9	97.1	98.5	100.6	101.4	98.9
107.5°	108.5	113.1	115.3	116.0	118.1	119.6	122.4	122.8	120.6
110°	129.9	134.2	137.0	137.8	139.9	141.3	144.2	144.2	142.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	152.0	156.7	159.2	159.9	162.4	163.5	166.3	166.7	164.9
115°	174.5	178.8	181.7	182.4	184.5	185.9	188.4	189.2	187.4
117.5°	197.0	201.3	203.4	204.9	207.4	208.4	209.9	210.9	209.1
120°	218.8	223.1	224.8	227.0	229.5	230.6	232.7	232.0	230.9
122.5°	240.9	244.8	246.6	249.1	252.0	252.3	253.8	253.4	252.7
125°	262.3	265.5	268.7	270.2	273.4	273.4	277.3	274.1	274.1
127.5°	284.1	286.6	290.9	291.6	294.4	294.8	299.4	294.8	295.9
130°	305.5	307.3	313.0	313.0	315.1	315.9	321.9	315.5	316.9
132.5°	326.6	328.0	334.8	334.1	336.2	336.9	343.7	336.2	335.8
135°	347.6	348.3	356.2	355.1	357.3	358.3	364.4	356.2	356.5
137.5°	368.3	368.0	376.2	375.8	378.0	378.7	384.4	374.7	377.2
140°	389.4	386.9	395.4	396.2	398.3	399.0	402.9	395.4	397.6
142.5°	408.7	407.6	414.0	415.1	417.9	417.9	421.5	414.0	416.9
145°	428.3	425.8	432.9	432.9	436.1	435.8	438.6	433.6	437.6
147.5°	447.6	444.3	450.4	450.8	453.6	453.6	456.1	451.1	456.1
150°	465.0	462.2	466.5	466.8	469.7	469.3	471.8	469.3	473.6
152.5°	481.8	479.0	481.8	481.5	485.0	484.0	487.2	485.0	490.0
155°	497.9	494.7	497.2	495.7	498.6	498.2	501.8	501.1	505.0
157.5°	512.5	508.9	511.1	509.3	511.1	511.4	515.4	515.0	519.3
160°	526.1	522.5	523.9	520.7	522.5	522.9	527.9	527.9	532.1
162.5°	538.2	534.3	535.7	530.7	532.5	532.5	538.9	538.9	543.2
165°	548.6	545.0	546.1	540.0	541.8	542.1	548.6	548.9	552.8
167.5°	557.8	553.9	554.3	548.6	550.0	550.3	556.0	556.8	561.4
170°	565.0	561.4	561.4	555.0	556.0	556.4	562.5	563.5	568.2
172.5°	570.7	566.8	566.0	559.3	558.5	560.3	566.4	568.5	572.8
175°	575.0	570.7	569.6	562.8	560.3	563.9	570.0	571.8	576.7
177.5°	576.7	572.5	571.8	564.6	564.3	565.3	571.0	573.2	577.5
180°	571.0	571.0	571.0	571.0	571.0	571.0	571.0	571.0	571.0

(END OF REPORT)