

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: P199561

Luminaire Tested: **S125-DIP-ULO-2-30-X-X0048-1D-UDD-1-5-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199561  
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-DIP-ULO-2-30-X-X0048-1D-UDD-1-5-W  
Description: DEFINE 5-INCH DIRECT/INDIRECT PENDANT LED LUMINAIRE  
UPLIGHT LLO-3000K, SATIN WHITE DIFFUSER  
DOWNLIGHT LL2-3000K, SATIN WHITE DIFFUSER  
Light Source: -  
757G  
Ballast/Driver: ELECTRONIC DRIVERS

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5508.7 lumens  
Efficiency: N/A  
Efficacy: 100.0 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

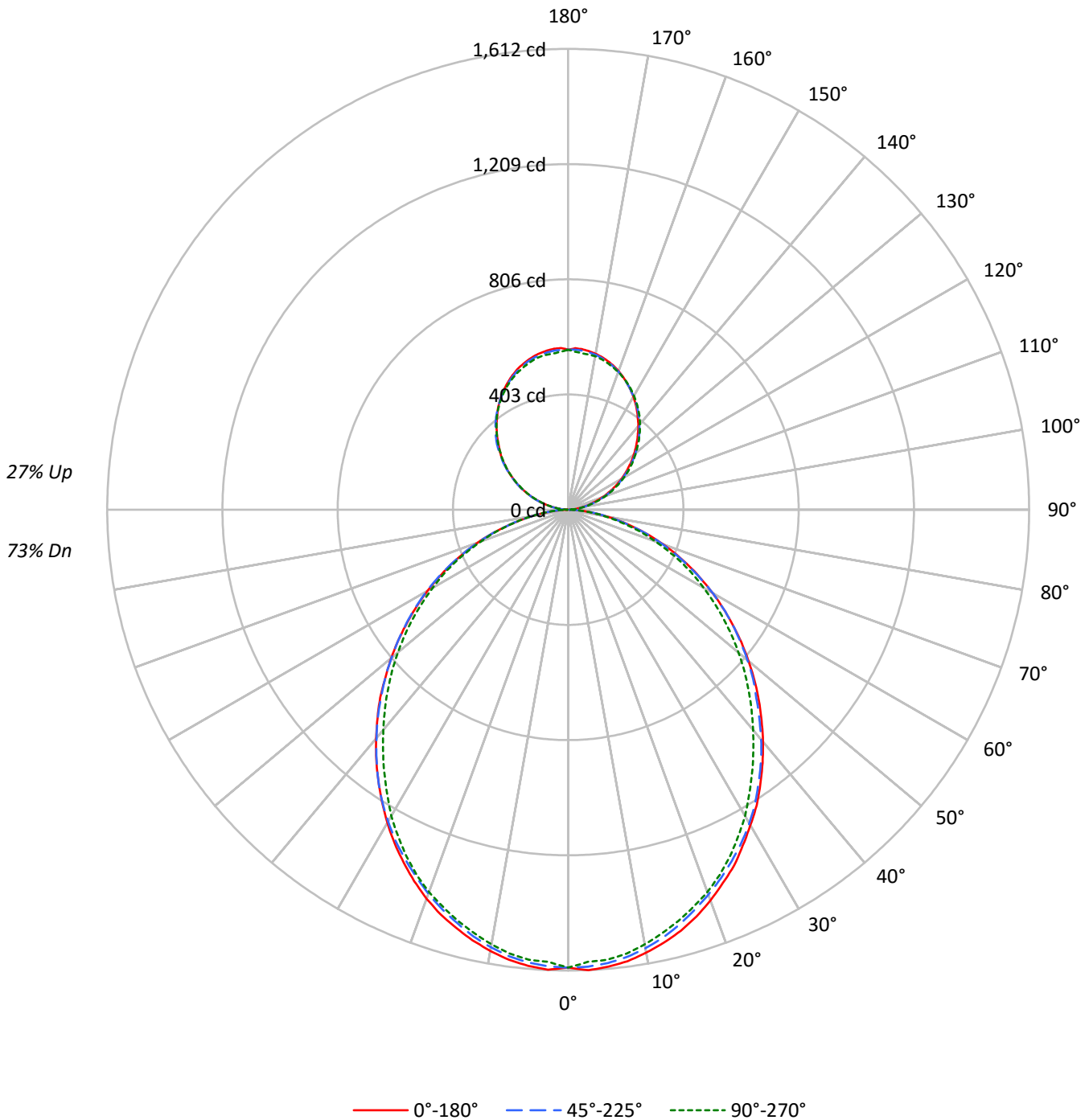
Input Watts (W): 55.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	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	2.7
10°-20°	422.8	7.7
20°-30°	621.2	11.3
30°-40°	717.4	13.0
40°-50°	711.1	12.9
50°-60°	616.8	11.2
60°-70°	450.5	8.2
70°-80°	246.2	4.5
80°-90°	64.0	1.2
90°-100°	28.1	0.5
100°-110°	100.2	1.8
110°-120°	178.3	3.2
120°-130°	237.8	4.3
130°-140°	269.1	4.9
140°-150°	265.8	4.8
150°-160°	225.1	4.1
160°-170°	150.7	2.7
170°-180°	52.9	1.0
0°-30°	1194.6	21.7
0°-40°	1912.0	34.7
0°-60°	3239.9	58.8
0°-90°	4000.6	72.6
90°-120°	306.6	5.6
90°-150°	1079.3	19.6
90°-180°	1508.0	27.4
0°-180°	5508.7	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°	19	23	25	27	24	22
105°	85	92	95	99	97	91
115°	171	178	181	185	184	169
125°	257	263	268	272	269	230
135°	341	349	350	357	350	263
145°	420	424	428	430	429	263
155°	488	487	489	492	495	225
165°	538	535	531	538	542	152
175°	564	558	549	559	565	53
180°	560	560	560	560	560	



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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°	6.6	9.1	9.1	8.0	9.8	11.2	13.6	13.6	11.9
95°	19.2	21.7	22.7	23.4	25.2	25.9	26.6	26.6	24.5
97.5°	32.9	36.4	37.1	38.1	40.2	40.6	41.6	42.0	39.5
100°	48.3	52.5	53.2	54.6	57.0	57.4	58.8	59.5	57.0
102.5°	65.8	70.7	71.7	72.8	74.5	75.9	77.7	78.7	75.9
105°	85.0	91.0	91.7	93.1	95.2	96.6	98.7	99.4	96.9
107.5°	106.4	110.9	113.0	113.7	115.8	117.2	120.0	120.3	118.2
110°	127.3	131.5	134.3	135.0	137.1	138.5	141.3	141.3	139.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	149.0	153.6	156.0	156.7	159.2	160.2	163.0	163.4	161.6
115°	171.1	175.3	178.1	178.8	180.9	182.3	184.7	185.4	183.7
117.5°	193.1	197.3	199.4	200.8	203.3	204.3	205.7	206.8	205.0
120°	214.5	218.7	220.4	222.5	224.9	226.0	228.1	227.4	226.3
122.5°	236.1	240.0	241.7	244.2	247.0	247.3	248.7	248.4	247.7
125°	257.1	260.3	263.4	264.8	268.0	268.0	271.8	268.7	268.7
127.5°	278.5	280.9	285.1	285.8	288.6	289.0	293.5	289.0	290.0
130°	299.5	301.2	306.8	306.8	308.9	309.6	315.6	309.3	310.7
132.5°	320.1	321.5	328.2	327.5	329.6	330.3	336.9	329.6	329.2
135°	340.7	341.4	349.1	348.1	350.2	351.2	357.2	349.1	349.5
137.5°	361.0	360.7	368.7	368.4	370.5	371.2	376.8	367.3	369.8
140°	381.7	379.2	387.6	388.3	390.4	391.1	395.0	387.6	389.7
142.5°	400.6	399.5	405.8	406.9	409.7	409.7	413.2	405.8	408.6
145°	419.8	417.4	424.4	424.4	427.5	427.2	430.0	425.1	428.9
147.5°	438.7	435.6	441.5	441.9	444.6	444.6	447.1	442.2	447.1
150°	455.8	453.0	457.2	457.6	460.4	460.0	462.5	460.0	464.2
152.5°	472.3	469.5	472.3	471.9	475.4	474.4	477.5	475.4	480.3
155°	488.0	484.9	487.3	485.9	488.7	488.4	491.9	491.2	495.0
157.5°	502.4	498.9	501.0	499.2	501.0	501.3	505.2	504.8	509.0
160°	515.7	512.2	513.6	510.4	512.2	512.5	517.4	517.4	521.6
162.5°	527.6	523.7	525.1	520.2	522.0	522.0	528.3	528.3	532.5
165°	537.7	534.2	535.3	529.3	531.1	531.4	537.7	538.1	541.9
167.5°	546.8	543.0	543.3	537.7	539.1	539.5	545.1	545.8	550.3
170°	553.8	550.3	550.3	544.0	545.1	545.4	551.4	552.4	556.9
172.5°	559.4	555.5	554.9	548.2	547.5	549.3	555.2	557.3	561.5
175°	563.6	559.4	558.3	551.7	549.3	552.8	558.7	560.4	565.3
177.5°	565.3	561.1	560.4	553.5	553.1	554.2	559.7	561.8	566.0
180°	559.7	559.7	559.7	559.7	559.7	559.7	559.7	559.7	559.7

(END OF REPORT)