

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: P199562

Luminaire Tested: **S125-DIW-ULO-2-30-0048-1D-UDD-1-NA-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199562  
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-ULO-2-30-0048-1D-UDD-1-NA-W  
Description: DEFINE 5-INCH DIRECT/INDIRECT WALL LED LUMINAIRE  
UPLIGHT LLO-3000K, NO LENS  
DOWNLIGHT LL2-3000K, SATIN WHITE DIFFUSER  
Light Source: -  
757G  
Ballast/Driver: ELECTRONIC DRIVERS

**Summary**

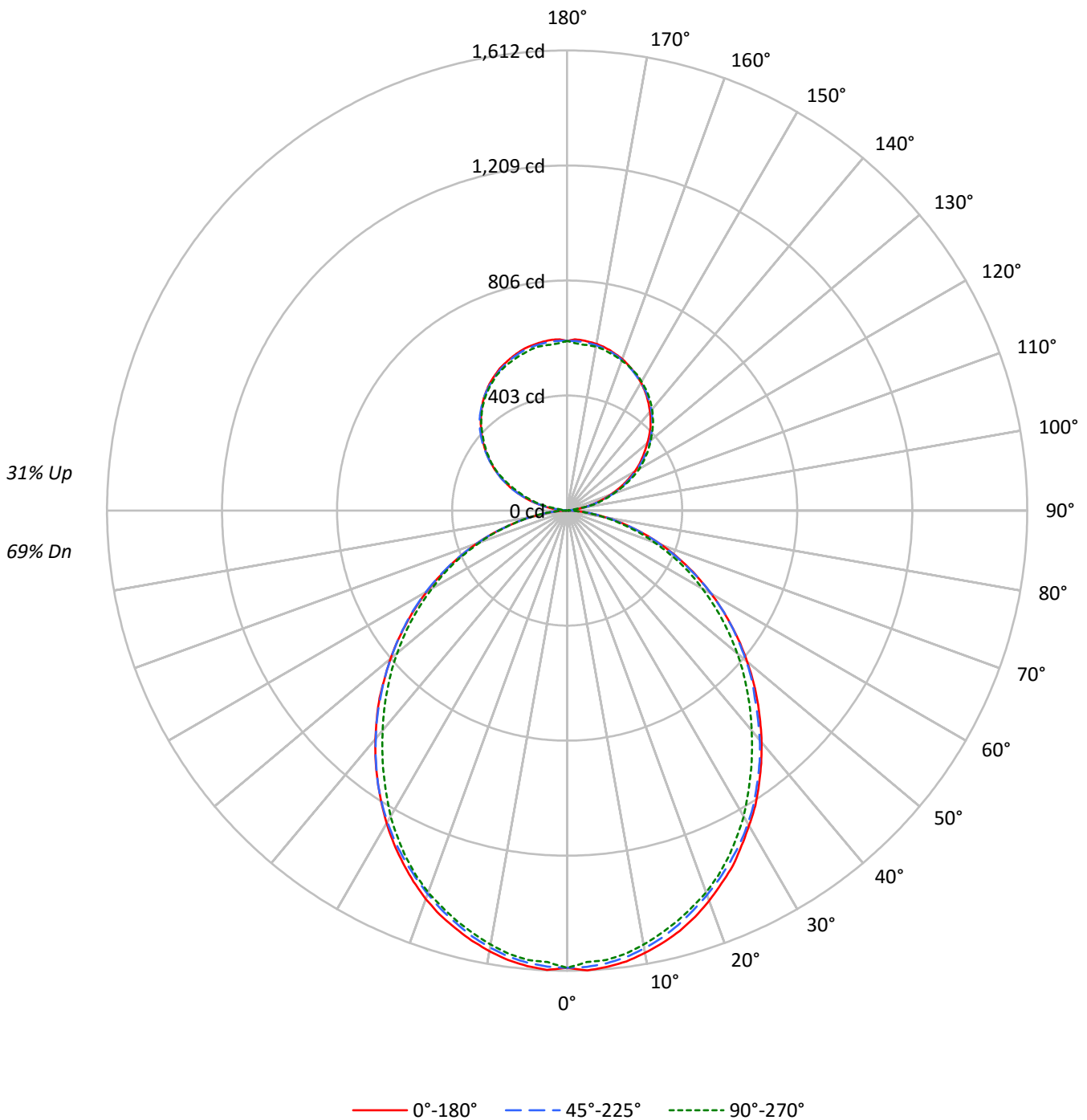
Lumens per Lamp: N/A  
Luminaire Lumens: 5781.6 lumens  
Efficiency: N/A  
Efficacy: 104.9 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.16 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4.08' x H: 0.38')  
CIE Type: Semi-Direct

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	112	112	112	112	106	106	106	106	94	94	94	83	83	83	74	74	74	69
1	102	98	94	90	96	93	89	86	83	80	78	74	72	70	65	64	63	58
2	93	86	79	74	88	81	75	71	73	68	64	65	61	58	58	55	53	49
3	85	75	68	62	80	71	65	59	64	59	54	57	53	50	51	48	45	42
4	78	67	59	52	73	63	56	50	57	51	46	51	46	43	46	42	39	36
5	72	60	51	45	67	57	49	43	51	45	40	46	41	37	41	37	34	31
6	66	54	45	39	62	51	43	38	46	40	35	42	37	33	38	33	30	27
7	61	49	40	35	58	46	39	33	42	36	31	38	33	29	34	30	27	24
8	57	44	36	31	54	42	35	30	38	32	28	35	30	26	32	27	24	22
9	53	41	33	28	50	39	32	27	35	29	25	32	27	23	29	25	22	20
10	50	37	30	25	47	36	29	24	33	27	23	30	25	21	27	23	20	18

**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	2.6
10°-20°	422.8	7.3
20°-30°	621.2	10.7
30°-40°	717.4	12.4
40°-50°	711.1	12.3
50°-60°	616.8	10.7
60°-70°	450.5	7.8
70°-80°	246.2	4.3
80°-90°	64.0	1.1
90°-100°	19.1	0.3
100°-110°	126.2	2.2
110°-120°	231.5	4.0
120°-130°	300.1	5.2
130°-140°	326.0	5.6
140°-150°	308.1	5.3
150°-160°	250.7	4.3
160°-170°	163.0	2.8
170°-180°	56.4	1.0
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0°-30°	1194.6	20.7
0°-40°	1912.0	33.1
0°-60°	3239.9	56.0
0°-90°	4000.6	69.2
90°-120°	376.7	6.5
90°-150°	1311.0	22.7
90°-180°	1781.0	30.8
0°-180°	5781.6	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	4
95°	13	4	4	6	29	19
105°	104	110	118	130	133	110
115°	218	227	234	245	244	215
125°	320	331	338	345	343	287
135°	412	422	425	434	428	317
145°	487	491	495	499	499	304
155°	543	541	544	548	552	250
165°	581	578	572	581	586	164
175°	599	593	584	594	601	57
180°	594	594	594	594	594	



TEST NUMBER: P199562

CATALOG NUMBER: S125-DIW-ULO-2-30-0048-1D-UDD-1-NA-W

**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°	1.7	2.4	2.4	2.8	2.8	3.1	3.5	4.2	11.9
95°	12.6	14.0	3.8	4.2	4.2	4.5	5.9	33.9	29.0
97.5°	29.0	37.1	12.2	7.3	6.6	9.8	37.8	53.9	51.1
100°	51.8	57.7	58.4	38.1	25.9	53.5	74.5	80.5	76.6
102.5°	76.6	83.3	81.5	88.5	91.0	98.7	100.4	108.1	105.0
105°	103.6	110.9	109.9	116.8	117.5	126.3	129.8	134.3	132.6
107.5°	131.9	137.1	139.9	144.5	144.1	153.6	160.6	162.7	160.9
110°	160.9	164.4	169.7	172.8	172.8	182.3	190.3	190.7	188.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	188.6	194.5	199.4	203.3	202.6	212.7	218.3	219.4	217.3
115°	218.0	220.4	227.0	232.6	233.7	241.4	245.2	246.3	244.2
117.5°	244.9	248.7	252.9	259.6	263.1	268.0	270.8	272.5	270.4
120°	273.6	276.0	278.5	284.8	291.1	293.9	296.0	297.4	295.6
122.5°	298.4	300.2	305.4	309.6	315.9	318.0	321.2	320.8	319.4
125°	320.5	322.9	330.6	333.1	338.3	341.1	344.9	342.8	342.8
127.5°	343.5	345.6	355.4	355.8	360.7	363.8	368.7	365.2	365.6
130°	366.3	369.8	378.5	378.5	382.4	385.9	391.5	386.2	387.6
132.5°	390.4	391.5	399.5	399.9	403.4	406.9	413.5	406.5	407.9
135°	412.5	411.4	421.9	420.2	425.1	427.2	433.8	425.4	427.9
137.5°	432.4	430.0	441.2	439.4	444.6	445.0	452.0	444.0	446.7
140°	452.0	449.2	458.6	457.6	463.5	462.8	468.1	461.4	465.3
142.5°	469.5	466.3	475.4	475.1	479.6	479.6	484.2	478.6	484.2
145°	486.6	482.4	490.8	490.5	495.4	495.0	499.2	494.0	499.2
147.5°	502.7	498.5	505.2	504.5	508.7	509.0	512.5	509.4	515.0
150°	517.4	513.6	517.8	517.4	521.3	521.6	525.1	523.7	527.9
152.5°	530.7	527.2	529.3	528.6	534.2	532.1	536.3	535.6	540.2
155°	543.0	539.5	541.2	539.8	543.7	543.3	547.9	547.2	552.4
157.5°	554.2	550.3	551.7	549.6	552.4	552.4	557.6	557.6	561.5
160°	565.0	559.7	561.5	558.0	559.0	560.4	566.7	566.7	570.2
162.5°	572.7	569.2	570.2	565.3	566.4	567.1	574.4	574.4	578.6
165°	581.1	576.5	577.6	571.6	572.0	573.7	581.1	581.4	586.0
167.5°	587.7	583.2	582.8	576.9	578.6	579.0	586.0	586.3	591.2
170°	593.0	588.1	588.1	581.8	583.2	582.5	589.8	590.9	595.1
172.5°	595.8	592.3	591.2	584.2	583.9	584.9	592.6	594.0	598.2
175°	599.3	595.1	593.3	586.7	583.9	587.4	594.4	595.8	600.7
177.5°	600.3	596.1	594.7	587.7	587.7	588.4	595.4	596.5	600.3
180°	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0

(END OF REPORT)