

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1056389

Luminaire Tested: S125R3DR-S1270D835-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056389  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125R3DR-S1270D835-X4F0-XX-UDD-FLL-S  
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

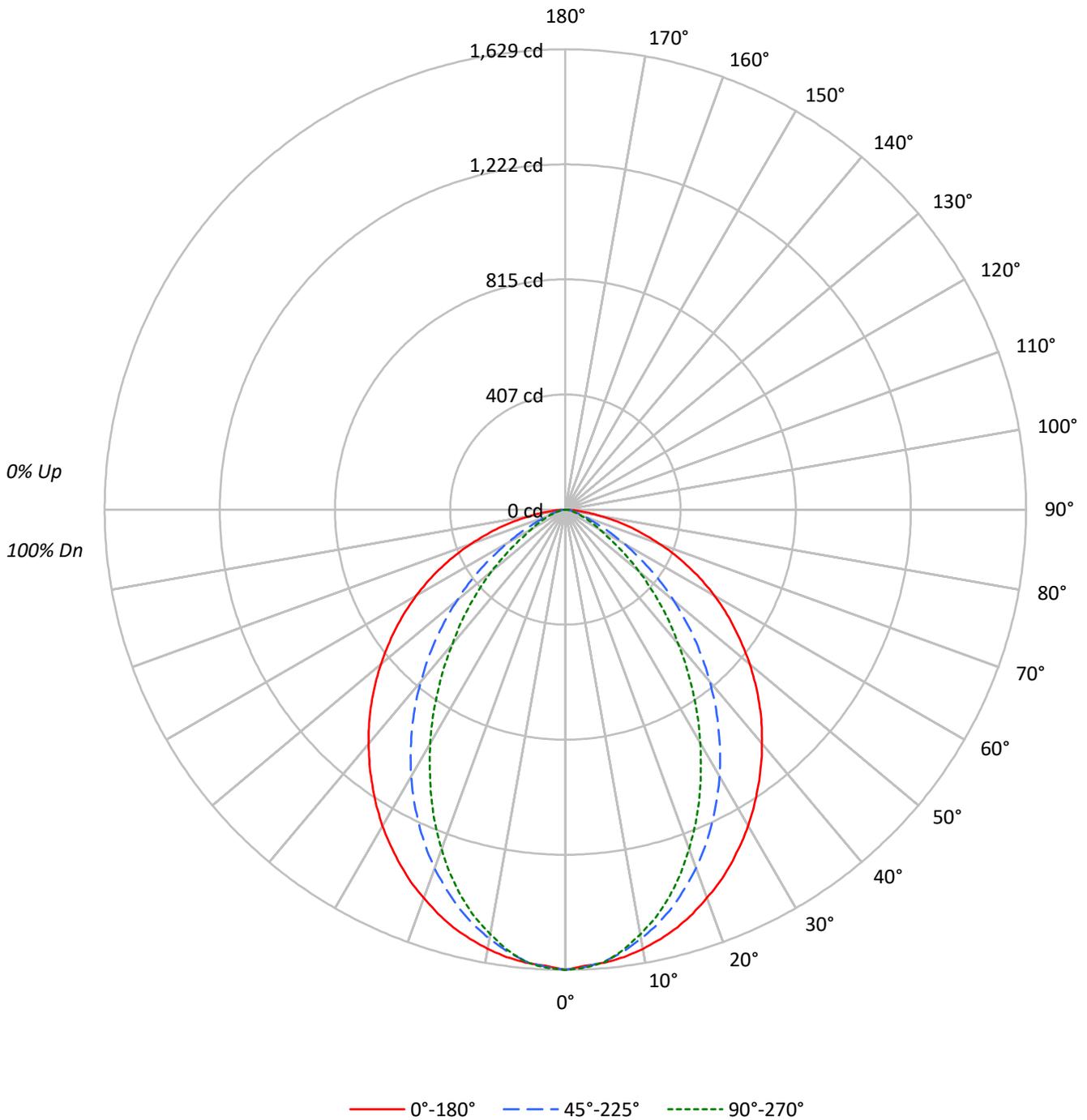
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2943.9 lumens  
Efficiency: N/A  
Efficacy: 70.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11  
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 41.9  
Input Voltage (V): 120  
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: 24 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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

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

	0°	45°	90°
0°	11515	11515	11515
5°	11419	11387	11409
10°	11335	11075	10956
15°	11203	10674	10387
20°	11005	10166	9621
25°	10799	9564	8753
30°	10551	8901	7793
35°	10269	8148	6781
40°	9979	7321	5735
45°	9695	6453	4750
50°	9355	5490	3732
55°	8996	4462	2714
60°	8593	3327	1940
65°	8073	2195	1514
70°	7294	1527	1060
75°	6345	989	825
80°	4975	737	676
85°	2571	608	487

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9695 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.7	5.2
10°-20°	412.5	14.0
20°-30°	570.3	19.4
30°-40°	604.2	20.5
40°-50°	527.4	17.9
50°-60°	375.1	12.7
60°-70°	208.6	7.1
70°-80°	80.2	2.7
80°-90°	13.9	0.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1134.5	38.5
0°-40°	1738.7	59.1
0°-60°	2641.3	89.7
0°-90°	2943.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2943.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1629	1629	1629	1629	1629	
5°	1609	1621	1605	1600	1608	153
15°	1531	1517	1458	1427	1419	431
25°	1384	1338	1226	1151	1122	637
35°	1190	1108	944	830	786	744
45°	970	854	646	516	475	748
55°	730	585	362	250	220	653
65°	483	317	131	96	90	477
75°	232	90	36	30	30	246
85°	32	9	8	6	6	47
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1628.8	1628.8	1628.8	1628.8	1628.8
2.5°	1616.7	1633.3	1619.8	1621.3	1622.8
5°	1609.2	1621.3	1604.7	1600.2	1607.7
7.5°	1597.1	1606.2	1577.5	1567.0	1571.5
10°	1579.0	1582.1	1542.8	1527.8	1526.3
12.5°	1556.4	1551.9	1503.6	1479.5	1478.0
15°	1530.8	1517.2	1458.4	1426.7	1419.2
17.5°	1499.1	1478.0	1405.6	1364.9	1352.8
20°	1462.9	1434.3	1351.3	1298.5	1278.9
22.5°	1426.7	1387.5	1291.0	1224.6	1203.5
25°	1384.5	1337.7	1226.1	1150.7	1122.1
27.5°	1339.2	1283.4	1159.8	1072.3	1037.6
30°	1292.5	1227.6	1090.4	992.4	954.7
32.5°	1242.7	1168.8	1018.0	910.9	871.7
35°	1189.9	1108.5	944.1	829.5	785.7
37.5°	1137.1	1046.7	871.7	749.6	704.3
40°	1081.3	983.3	793.3	668.1	621.4
42.5°	1027.1	918.5	719.4	591.2	549.0
45°	969.7	853.6	645.5	515.8	475.1
47.5°	910.9	785.7	571.6	444.9	404.2
50°	850.6	719.4	499.2	375.5	339.3
52.5°	790.3	653.0	431.3	309.2	277.5
55°	729.9	585.2	362.0	250.4	220.2
57.5°	669.6	518.8	297.1	196.1	168.9
60°	607.8	450.9	235.3	144.8	137.2
62.5°	546.0	384.6	182.5	119.1	113.1
65°	482.6	316.7	131.2	96.5	90.5
67.5°	419.3	254.9	95.0	73.9	69.4
70°	352.9	194.6	73.9	55.8	51.3
72.5°	289.6	140.3	52.8	40.7	39.2
75°	232.3	90.5	36.2	30.2	30.2
77.5°	174.9	54.3	25.6	22.6	22.6
80°	122.2	31.7	18.1	16.6	16.6
82.5°	73.9	16.6	12.1	10.6	10.6
85°	31.7	9.0	7.5	6.0	6.0
87.5°	6.0	3.0	3.0	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)