

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 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-F-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
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-F-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: -

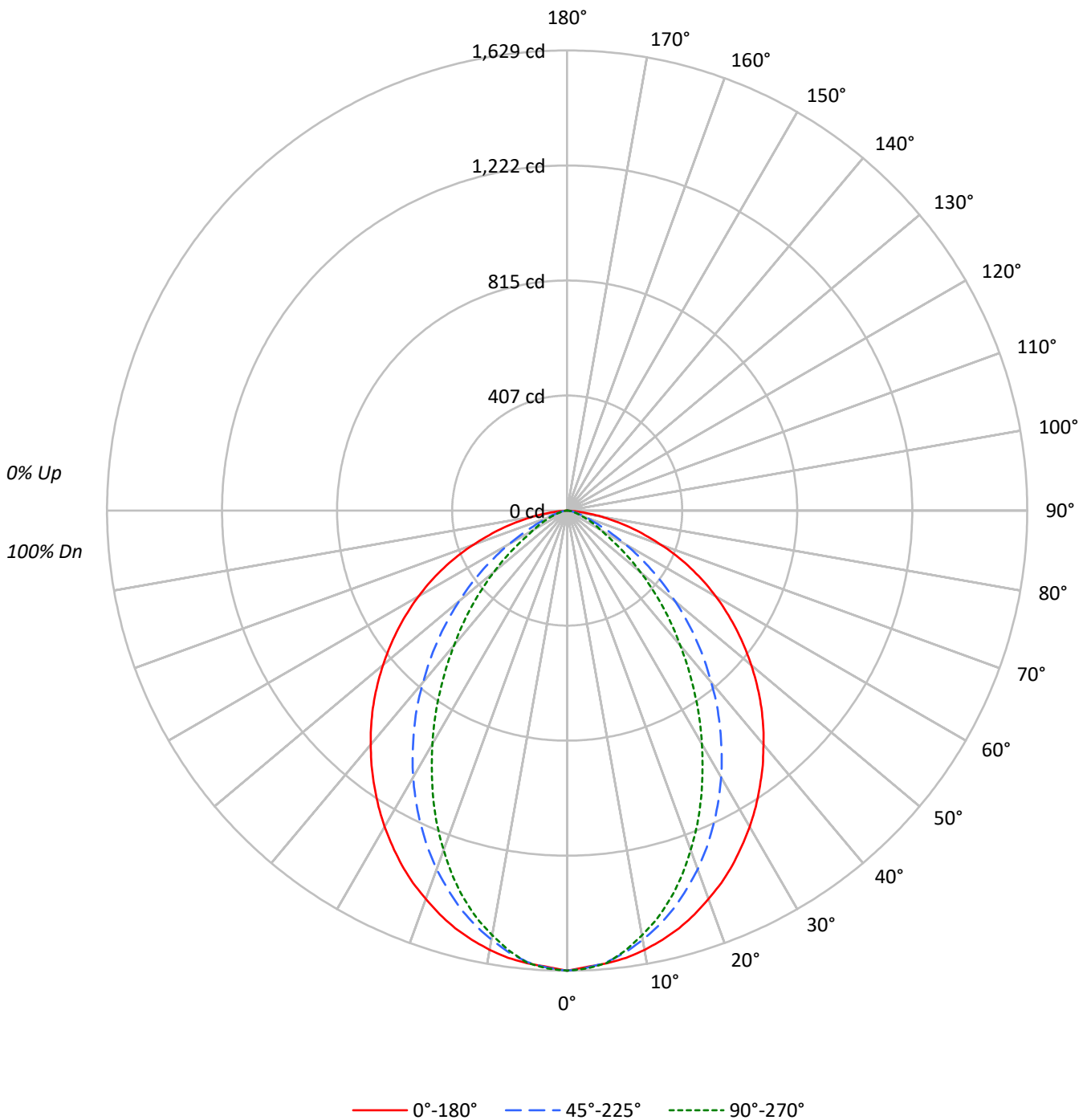
**Summary**

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 (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: 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



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**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	19.65	21.10	20.02	21.41	21.72	12.29	13.74	12.66	14.05	14.36
	3H	21.21	22.50	21.59	22.83	23.19	12.85	14.14	13.23	14.47	14.83
	4H	21.73	22.93	22.13	23.28	23.66	12.98	14.18	13.38	14.53	14.91
	6H	22.07	23.18	22.48	23.54	23.94	13.04	14.15	13.46	14.52	14.91
	8H	22.15	23.20	22.58	23.59	24.00	13.05	14.10	13.48	14.49	14.89
	12H	22.18	23.18	22.61	23.56	23.99	13.04	14.04	13.47	14.43	14.86
4H	2H	19.55	20.75	19.95	21.10	21.48	12.86	14.06	13.26	14.41	14.79
	3H	21.21	22.20	21.63	22.60	23.01	13.53	14.51	13.94	14.92	15.32
	4H	21.76	22.65	22.20	23.06	23.51	13.69	14.57	14.12	14.99	15.43
	6H	22.16	22.92	22.62	23.37	23.83	13.80	14.56	14.26	15.00	15.47
	8H	22.26	22.97	22.73	23.42	23.89	13.81	14.52	14.28	14.97	15.44
	12H	22.31	22.94	22.79	23.42	23.90	13.81	14.44	14.29	14.92	15.40
8H	4H	21.67	22.38	22.13	22.83	23.30	13.95	14.67	14.42	15.11	15.58
	6H	22.05	22.64	22.55	23.13	23.61	14.09	14.67	14.59	15.17	15.65
	8H	22.16	22.69	22.68	23.20	23.69	14.12	14.64	14.63	15.15	15.64
	12H	22.23	22.69	22.74	23.18	23.75	14.14	14.60	14.65	15.10	15.66
12H	4H	21.63	22.26	22.12	22.74	23.22	13.97	14.60	14.45	15.08	15.56
	6H	22.00	22.53	22.52	23.04	23.53	14.10	14.63	14.62	15.14	15.63
	8H	22.13	22.59	22.64	23.09	23.65	14.16	14.62	14.67	15.12	15.68