

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: P1056401

Luminaire Tested: S125R3DR-S1270D930-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056401  
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-S1270D930-X4F0-XX-UDD-F-S  
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

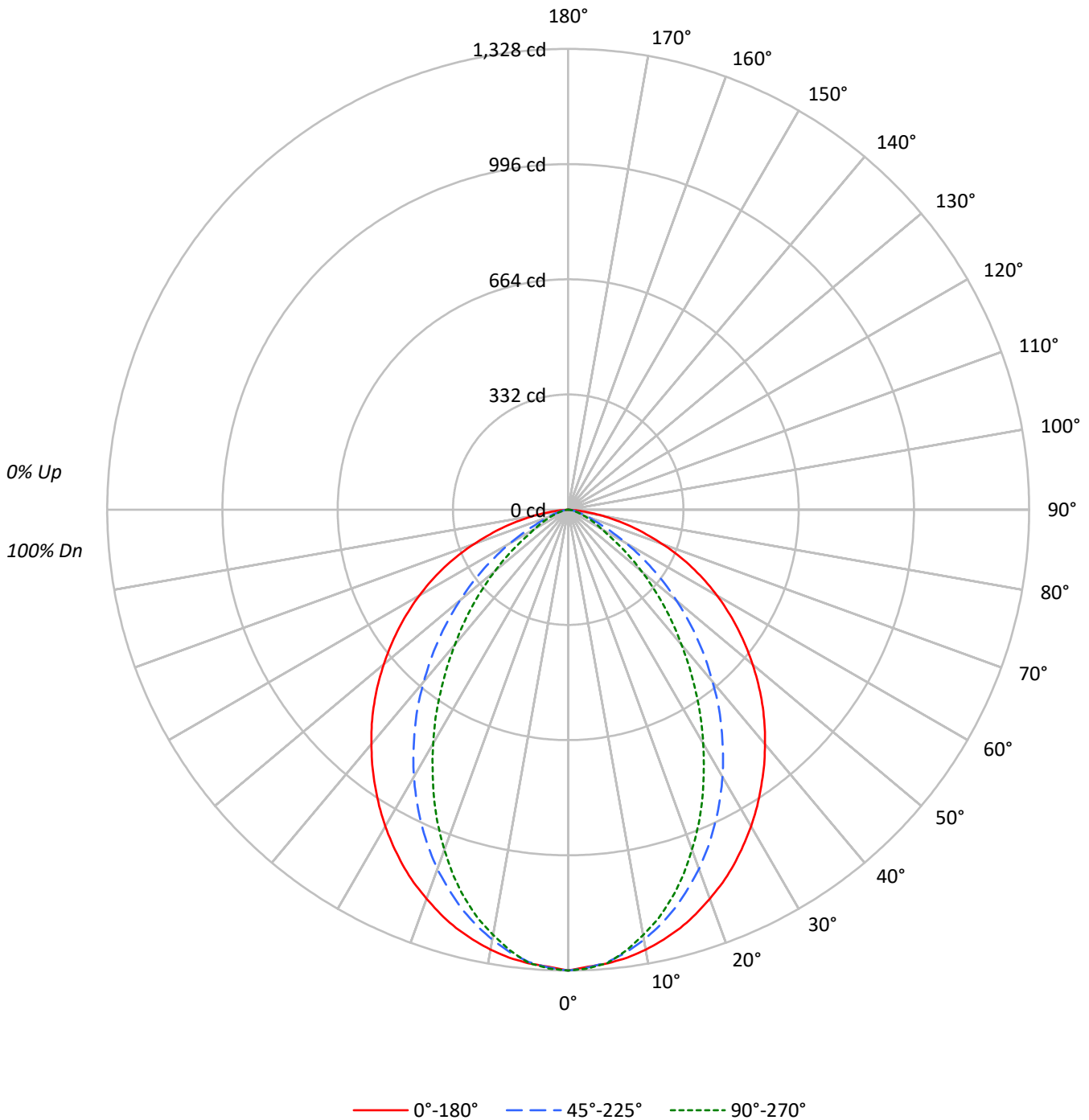
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2400.2 lumens  
Efficiency: N/A  
Efficacy: 57.3 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°	9388	9388	9388
5°	9310	9284	9301
10°	9241	9030	8932
15°	9134	8702	8468
20°	8973	8288	7844
25°	8805	7798	7136
30°	8602	7257	6353
35°	8372	6643	5528
40°	8136	5969	4675
45°	7904	5262	3872
50°	7627	4476	3043
55°	7335	3637	2212
60°	7006	2712	1582
65°	6582	1790	1234
70°	5947	1246	864
75°	5173	806	672
80°	4055	603	550
85°	2093	495	397

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7904 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.7	5.2
10°-20°	336.3	14.0
20°-30°	465.0	19.4
30°-40°	492.6	20.5
40°-50°	430.0	17.9
50°-60°	305.8	12.7
60°-70°	170.1	7.1
70°-80°	65.4	2.7
80°-90°	11.3	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°	924.9	38.5
0°-40°	1417.6	59.1
0°-60°	2153.4	89.7
0°-90°	2400.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2400.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1328	1328	1328	1328	1328	
5°	1312	1322	1308	1305	1311	124
15°	1248	1237	1189	1163	1157	351
25°	1129	1091	1000	938	915	520
35°	970	904	770	676	641	607
45°	791	696	526	420	387	609
55°	595	477	295	204	180	532
65°	394	258	107	79	74	389
75°	189	74	30	25	25	201
85°	26	7	6	5	5	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1328.0	1328.0	1328.0	1328.0	1328.0
2.5°	1318.1	1331.7	1320.6	1321.8	1323.0
5°	1312.0	1321.8	1308.3	1304.6	1310.7
7.5°	1302.1	1309.5	1286.2	1277.5	1281.2
10°	1287.4	1289.8	1257.9	1245.6	1244.3
12.5°	1268.9	1265.3	1225.9	1206.2	1205.0
15°	1248.0	1237.0	1189.0	1163.2	1157.0
17.5°	1222.2	1205.0	1146.0	1112.8	1102.9
20°	1192.7	1169.3	1101.7	1058.7	1042.7
22.5°	1163.2	1131.2	1052.5	998.4	981.2
25°	1128.8	1090.7	999.7	938.2	914.8
27.5°	1091.9	1046.4	945.6	874.2	846.0
30°	1053.8	1000.9	889.0	809.1	778.3
32.5°	1013.2	952.9	830.0	742.7	710.7
35°	970.1	903.8	769.7	676.3	640.6
37.5°	927.1	853.3	710.7	611.1	574.2
40°	881.6	801.7	646.8	544.7	506.6
42.5°	837.4	748.8	586.5	482.0	447.6
45°	790.6	696.0	526.3	420.5	387.3
47.5°	742.7	640.6	466.0	362.7	329.5
50°	693.5	586.5	407.0	306.2	276.7
52.5°	644.3	532.4	351.7	252.1	226.2
55°	595.1	477.1	295.1	204.1	179.5
57.5°	545.9	423.0	242.2	159.8	137.7
60°	495.5	367.6	191.8	118.0	111.9
62.5°	445.1	313.5	148.8	97.1	92.2
65°	393.5	258.2	107.0	78.7	73.8
67.5°	341.8	207.8	77.5	60.3	56.6
70°	287.7	158.6	60.3	45.5	41.8
72.5°	236.1	114.4	43.0	33.2	32.0
75°	189.4	73.8	29.5	24.6	24.6
77.5°	142.6	44.3	20.9	18.4	18.4
80°	99.6	25.8	14.8	13.5	13.5
82.5°	60.3	13.5	9.8	8.6	8.6
85°	25.8	7.4	6.1	4.9	4.9
87.5°	4.9	2.5	2.5	2.5	2.5
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	18.94	20.39	19.31	20.70	21.02	11.58	13.02	11.94	13.34	13.65
	3H	20.50	21.79	20.88	22.12	22.48	12.14	13.43	12.52	13.76	14.12
	4H	21.02	22.22	21.42	22.57	22.95	12.27	13.47	12.67	13.82	14.20
	6H	21.36	22.47	21.77	22.84	23.23	12.33	13.44	12.75	13.81	14.20
	8H	21.44	22.49	21.87	22.88	23.29	12.34	13.39	12.76	13.78	14.18
	12H	21.47	22.47	21.90	22.85	23.28	12.33	13.33	12.76	13.71	14.14
4H	2H	18.84	20.04	19.24	20.39	20.77	12.14	13.35	12.54	13.70	14.08
	3H	20.51	21.49	20.92	21.89	22.30	12.82	13.80	13.23	14.21	14.61
	4H	21.05	21.94	21.49	22.35	22.80	12.97	13.86	13.41	14.28	14.72
	6H	21.45	22.21	21.91	22.66	23.12	13.09	13.85	13.55	14.29	14.76
	8H	21.55	22.26	22.02	22.71	23.18	13.10	13.81	13.56	14.26	14.72
	12H	21.60	22.23	22.08	22.71	23.19	13.10	13.73	13.58	14.21	14.69
8H	4H	20.96	21.67	21.42	22.12	22.59	13.24	13.96	13.71	14.40	14.87
	6H	21.34	21.93	21.84	22.42	22.90	13.38	13.96	13.88	14.46	14.93
	8H	21.45	21.98	21.97	22.49	22.98	13.40	13.93	13.92	14.44	14.93
	12H	21.52	21.98	22.03	22.47	23.04	13.43	13.89	13.94	14.38	14.95
12H	4H	20.92	21.55	21.41	22.04	22.51	13.26	13.89	13.74	14.37	14.85
	6H	21.29	21.82	21.81	22.33	22.82	13.39	13.91	13.91	14.43	14.92
	8H	21.42	21.88	21.93	22.38	22.94	13.45	13.91	13.96	14.40	14.97