

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: P1056374

Luminaire Tested: S125R3DR-S1090D930-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056374  
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-S1090D930-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: -

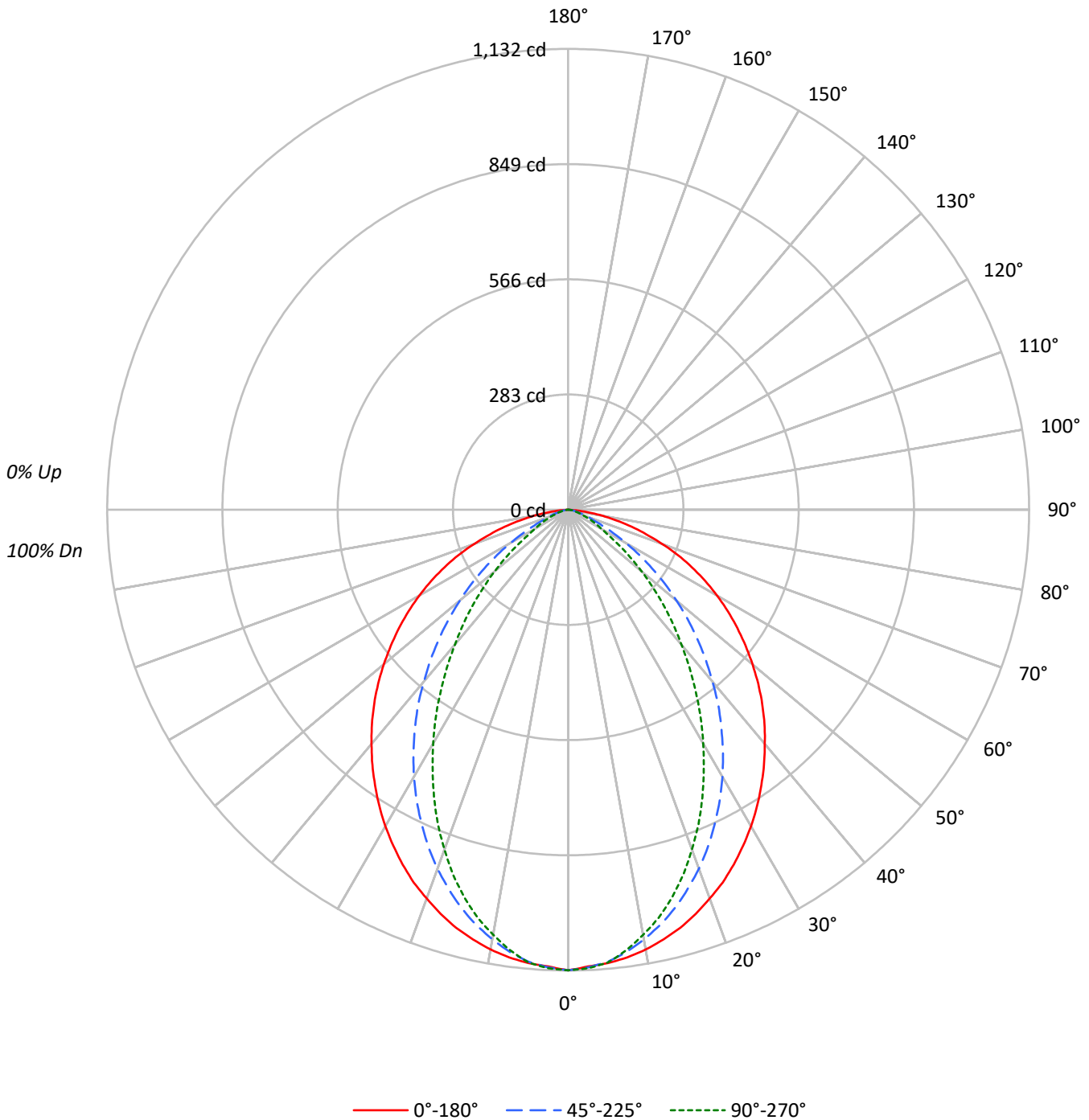
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2045.2 lumens  
Efficiency: N/A  
Efficacy: 58.9 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): 34.7  
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°	7999	7999	7999
5°	7933	7911	7926
10°	7875	7694	7611
15°	7783	7415	7216
20°	7646	7062	6684
25°	7502	6644	6080
30°	7330	6183	5414
35°	7134	5660	4711
40°	6932	5086	3984
45°	6735	4483	3299
50°	6499	3814	2592
55°	6250	3100	1886
60°	5969	2310	1347
65°	5609	1526	1052
70°	5068	1060	736
75°	4406	686	574
80°	3456	513	468
85°	1784	422	341

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6735 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.4	5.2
10°-20°	286.5	14.0
20°-30°	396.2	19.4
30°-40°	419.8	20.5
40°-50°	366.4	17.9
50°-60°	260.6	12.7
60°-70°	144.9	7.1
70°-80°	55.7	2.7
80°-90°	9.6	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°	788.1	38.5
0°-40°	1207.9	59.1
0°-60°	1834.9	89.7
0°-90°	2045.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2045.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1132	1132	1132	1132	1132	
5°	1118	1126	1115	1112	1117	106
15°	1063	1054	1013	991	986	300
25°	962	929	852	799	780	443
35°	827	770	656	576	546	517
45°	674	593	448	358	330	519
55°	507	406	252	174	153	453
65°	335	220	91	67	63	331
75°	161	63	25	21	21	171
85°	22	6	5	4	4	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1131.5	1131.5	1131.5	1131.5	1131.5
2.5°	1123.1	1134.7	1125.2	1126.3	1127.3
5°	1117.9	1126.3	1114.8	1111.6	1116.9
7.5°	1109.5	1115.8	1095.9	1088.6	1091.7
10°	1097.0	1099.0	1071.8	1061.3	1060.3
12.5°	1081.2	1078.1	1044.6	1027.8	1026.8
15°	1063.4	1054.0	1013.1	991.1	985.9
17.5°	1041.4	1026.8	976.5	948.2	939.8
20°	1016.3	996.4	938.7	902.1	888.5
22.5°	991.1	963.9	896.8	850.7	836.1
25°	961.8	929.3	851.8	799.4	779.5
27.5°	930.4	891.6	805.7	744.9	720.8
30°	897.9	852.8	757.5	689.4	663.2
32.5°	863.3	812.0	707.2	632.8	605.6
35°	826.6	770.1	655.9	576.2	545.9
37.5°	790.0	727.1	605.6	520.7	489.3
40°	751.2	683.1	551.1	464.1	431.7
42.5°	713.5	638.1	499.8	410.7	381.4
45°	673.7	593.0	448.4	358.3	330.0
47.5°	632.8	545.9	397.1	309.1	280.8
50°	590.9	499.8	346.8	260.9	235.7
52.5°	549.0	453.7	299.6	214.8	192.8
55°	507.1	406.5	251.5	173.9	153.0
57.5°	465.2	360.4	206.4	136.2	117.3
60°	422.2	313.3	163.4	100.6	95.3
62.5°	379.3	267.2	126.8	82.8	78.6
65°	335.3	220.0	91.2	67.1	62.9
67.5°	291.3	177.1	66.0	51.3	48.2
70°	245.2	135.2	51.3	38.8	35.6
72.5°	201.2	97.4	36.7	28.3	27.2
75°	161.3	62.9	25.1	21.0	21.0
77.5°	121.5	37.7	17.8	15.7	15.7
80°	84.9	22.0	12.6	11.5	11.5
82.5°	51.3	11.5	8.4	7.3	7.3
85°	22.0	6.3	5.2	4.2	4.2
87.5°	4.2	2.1	2.1	2.1	2.1
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	18.39	19.83	18.75	20.14	20.46	11.02	12.47	11.39	12.78	13.10
	3H	19.95	21.23	20.32	21.56	21.92	11.59	12.87	11.97	13.20	13.57
	4H	20.47	21.67	20.87	22.02	22.40	11.71	12.91	12.11	13.26	13.64
	6H	20.80	21.91	21.22	22.28	22.67	11.78	12.88	12.19	13.25	13.64
	8H	20.89	21.94	21.31	22.33	22.73	11.78	12.83	12.21	13.22	13.62
	12H	20.91	21.92	21.34	22.30	22.73	11.77	12.78	12.20	13.16	13.59
4H	2H	18.28	19.48	18.68	19.83	20.21	11.59	12.79	11.99	13.14	13.52
	3H	19.95	20.94	20.36	21.34	21.74	12.26	13.25	12.67	13.65	14.05
	4H	20.50	21.38	20.93	21.80	22.24	12.42	13.30	12.85	13.72	14.16
	6H	20.89	21.66	21.35	22.10	22.56	12.53	13.29	12.99	13.74	14.20
	8H	21.00	21.71	21.46	22.15	22.62	12.54	13.25	13.01	13.70	14.17
	12H	21.04	21.68	21.53	22.16	22.63	12.54	13.18	13.03	13.66	14.13
8H	4H	20.40	21.11	20.87	21.56	22.03	12.69	13.40	13.15	13.85	14.32
	6H	20.79	21.37	21.29	21.87	22.35	12.82	13.41	13.32	13.90	14.38
	8H	20.90	21.42	21.41	21.93	22.42	12.85	13.37	13.37	13.89	14.38
	12H	20.96	21.42	21.47	21.92	22.48	12.87	13.33	13.38	13.83	14.40
12H	4H	20.37	21.00	20.85	21.48	21.95	12.70	13.34	13.19	13.82	14.29
	6H	20.74	21.26	21.25	21.77	22.26	12.83	13.36	13.35	13.87	14.36
	8H	20.86	21.33	21.38	21.82	22.39	12.89	13.36	13.40	13.85	14.42