

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: P1056437

Luminaire Tested: S125R3DR-S375D950-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056437  
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-S375D950-X4F0-XX-UDD-F-S  
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

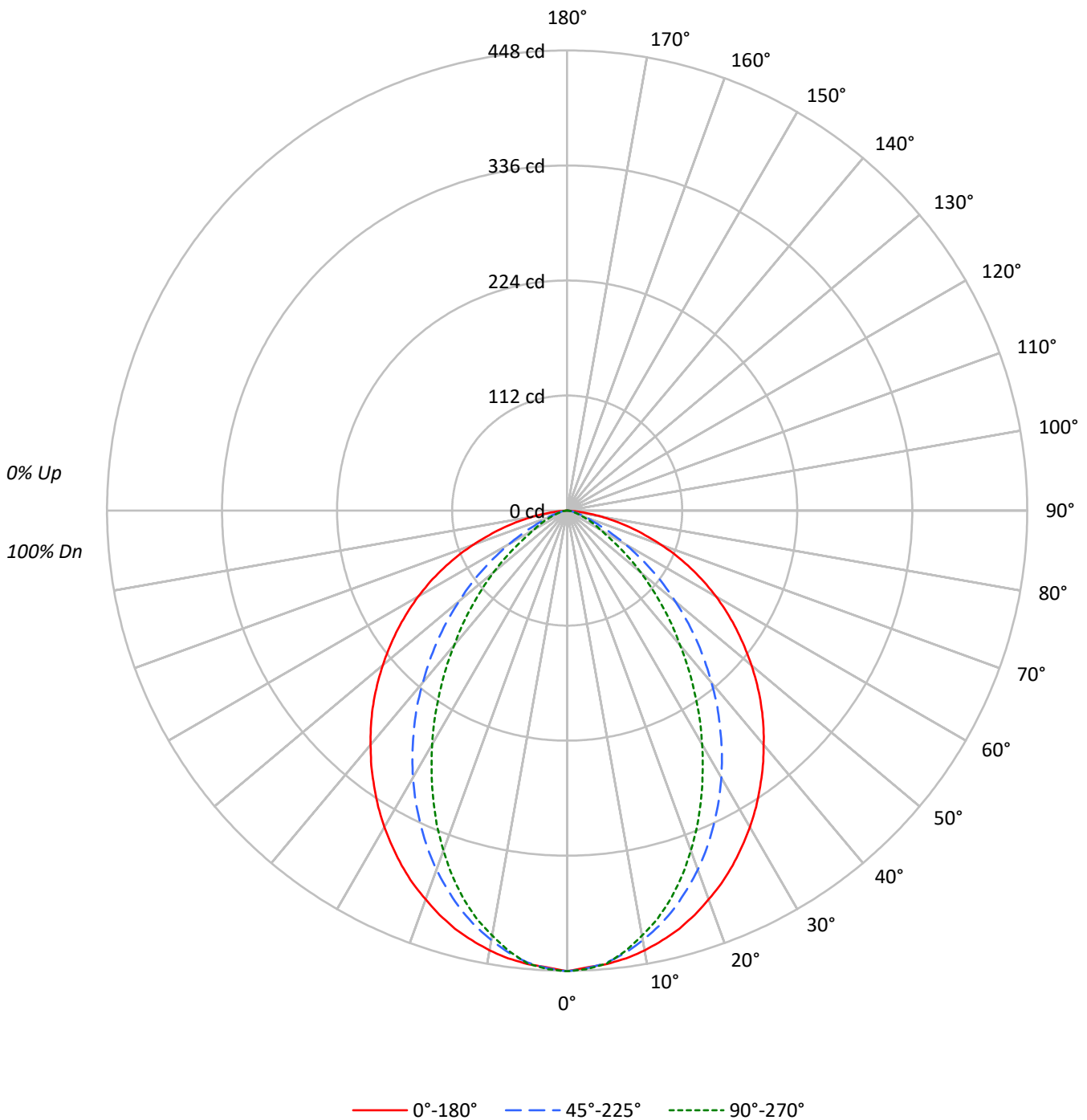
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 810.5 lumens  
Efficiency: N/A  
Efficacy: 64.3 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): 12.6  
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°	3171	3171	3171
5°	3144	3135	3141
10°	3121	3049	3016
15°	3085	2938	2859
20°	3030	2799	2649
25°	2973	2633	2409
30°	2905	2451	2145
35°	2827	2243	1867
40°	2747	2015	1579
45°	2669	1777	1308
50°	2576	1511	1027
55°	2477	1229	747
60°	2365	916	534
65°	2223	604	417
70°	2009	420	291
75°	1745	273	227
80°	1368	204	187
85°	706	170	138

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2669 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.8	5.2
10°-20°	113.6	14.0
20°-30°	157.0	19.4
30°-40°	166.4	20.5
40°-50°	145.2	17.9
50°-60°	103.3	12.7
60°-70°	57.4	7.1
70°-80°	22.1	2.7
80°-90°	3.8	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°	312.4	38.5
0°-40°	478.7	59.1
0°-60°	727.2	89.7
0°-90°	810.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	810.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	448	448	448	448	448	
5°	443	446	442	441	443	42
15°	422	418	402	393	391	119
25°	381	368	338	317	309	175
35°	328	305	260	228	216	205
45°	267	235	178	142	131	206
55°	201	161	100	69	61	180
65°	133	87	36	27	25	131
75°	64	25	10	8	8	68
85°	9	2	2	2	2	13
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	448.5	448.5	448.5	448.5	448.5
2.5°	445.1	449.7	446.0	446.4	446.8
5°	443.1	446.4	441.8	440.6	442.6
7.5°	439.7	442.2	434.3	431.4	432.7
10°	434.8	435.6	424.8	420.6	420.2
12.5°	428.5	427.3	414.0	407.3	406.9
15°	421.5	417.7	401.5	392.8	390.7
17.5°	412.7	406.9	387.0	375.8	372.5
20°	402.8	394.9	372.1	357.5	352.1
22.5°	392.8	382.0	355.4	337.2	331.4
25°	381.2	368.3	337.6	316.8	308.9
27.5°	368.7	353.4	319.3	295.2	285.7
30°	355.9	338.0	300.2	273.2	262.8
32.5°	342.2	321.8	280.3	250.8	240.0
35°	327.6	305.2	259.9	228.4	216.3
37.5°	313.1	288.2	240.0	206.4	193.9
40°	297.7	270.7	218.4	183.9	171.1
42.5°	282.8	252.9	198.1	162.8	151.1
45°	267.0	235.0	177.7	142.0	130.8
47.5°	250.8	216.3	157.4	122.5	111.3
50°	234.2	198.1	137.4	103.4	93.4
52.5°	217.6	179.8	118.8	85.1	76.4
55°	201.0	161.1	99.7	68.9	60.6
57.5°	184.4	142.8	81.8	54.0	46.5
60°	167.3	124.2	64.8	39.9	37.8
62.5°	150.3	105.9	50.2	32.8	31.1
65°	132.9	87.2	36.1	26.6	24.9
67.5°	115.4	70.2	26.2	20.3	19.1
70°	97.2	53.6	20.3	15.4	14.1
72.5°	79.7	38.6	14.5	11.2	10.8
75°	63.9	24.9	10.0	8.3	8.3
77.5°	48.2	14.9	7.1	6.2	6.2
80°	33.6	8.7	5.0	4.6	4.6
82.5°	20.3	4.6	3.3	2.9	2.9
85°	8.7	2.5	2.1	1.7	1.7
87.5°	1.7	0.8	0.8	0.8	0.8
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	15.17	16.61	15.53	16.93	17.24	7.81	9.26	8.18	9.57	9.88
	3H	16.73	18.02	17.11	18.34	18.71	8.37	9.66	8.75	9.99	10.35
	4H	17.25	18.45	17.65	18.80	19.18	8.50	9.70	8.90	10.05	10.43
	6H	17.59	18.69	18.00	19.06	19.46	8.56	9.67	8.98	10.04	10.43
	8H	17.67	18.72	18.10	19.11	19.51	8.57	9.62	8.99	10.01	10.41
	12H	17.69	18.70	18.12	19.08	19.51	8.56	9.56	8.99	9.95	10.38
4H	2H	15.07	16.27	15.47	16.62	17.00	8.37	9.58	8.77	9.93	10.31
	3H	16.73	17.72	17.14	18.12	18.52	9.05	10.03	9.46	10.43	10.84
	4H	17.28	18.16	17.71	18.58	19.02	9.20	10.09	9.64	10.50	10.94
	6H	17.67	18.44	18.13	18.88	19.35	9.31	10.08	9.77	10.52	10.99
	8H	17.78	18.49	18.24	18.94	19.41	9.33	10.04	9.79	10.48	10.95
	12H	17.83	18.46	18.31	18.94	19.41	9.33	9.96	9.81	10.44	10.92
8H	4H	17.19	17.90	17.65	18.34	18.81	9.47	10.19	9.94	10.63	11.10
	6H	17.57	18.16	18.07	18.65	19.13	9.61	10.19	10.11	10.69	11.16
	8H	17.68	18.20	18.20	18.72	19.21	9.63	10.16	10.15	10.67	11.16
	12H	17.74	18.21	18.25	18.70	19.27	9.66	10.12	10.17	10.62	11.18
12H	4H	17.15	17.78	17.63	18.26	18.73	9.49	10.12	9.97	10.60	11.07
	6H	17.52	18.04	18.04	18.56	19.05	9.62	10.14	10.14	10.66	11.15
	8H	17.65	18.11	18.16	18.60	19.17	9.68	10.14	10.19	10.63	11.20