

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: P1056434

Luminaire Tested: S125R3DR-S375D940-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056434  
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-S375D940-X4F0-XX-UDD-F-S  
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

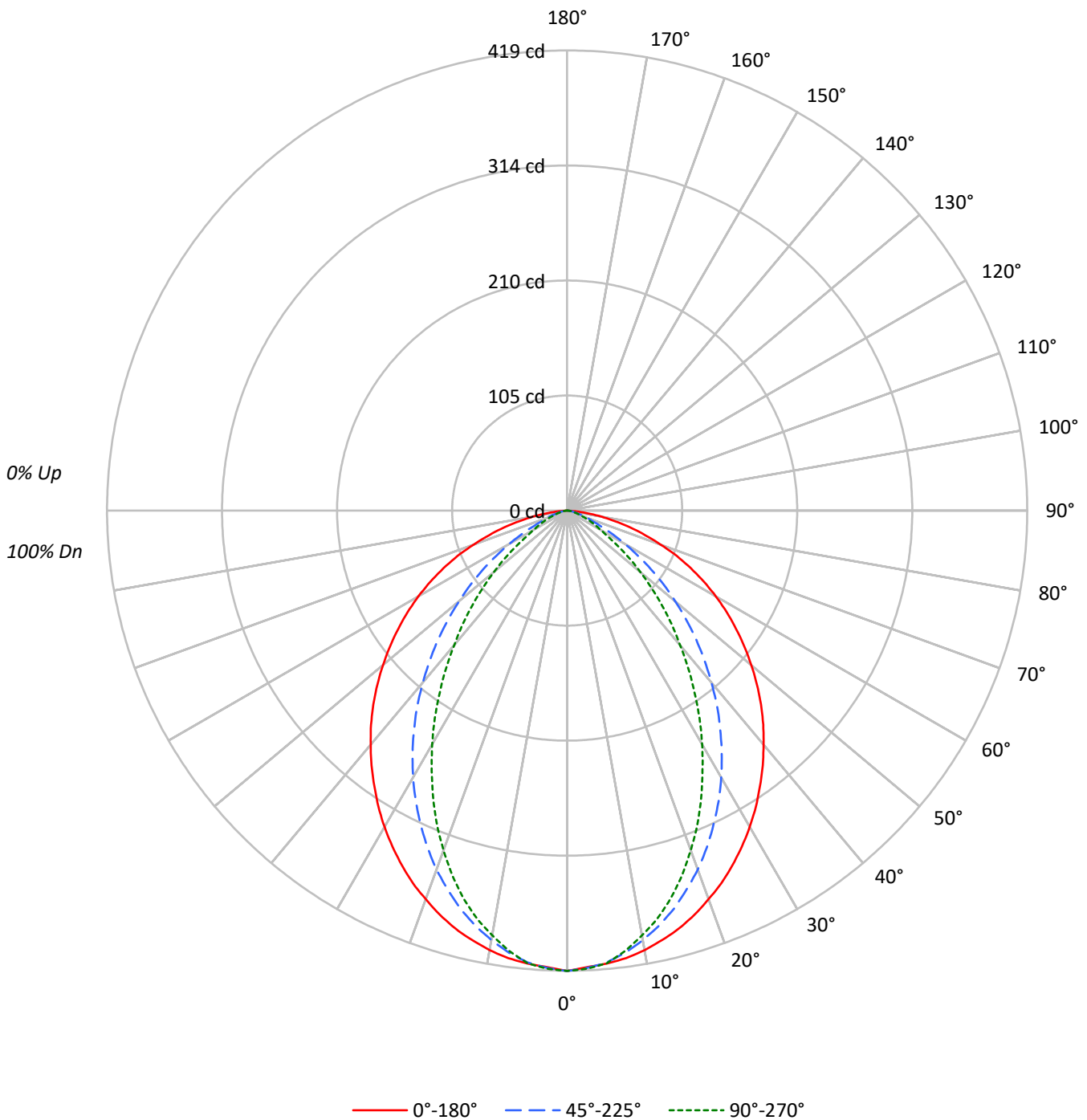
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 757.7 lumens  
Efficiency: N/A  
Efficacy: 60.1 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 (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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34

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

	0°	45°	90°
0°	2963	2963	2963
5°	2939	2931	2936
10°	2917	2851	2820
15°	2883	2747	2673
20°	2832	2617	2476
25°	2779	2461	2253
30°	2715	2291	2006
35°	2643	2097	1745
40°	2568	1884	1476
45°	2495	1661	1223
50°	2407	1413	960
55°	2316	1147	699
60°	2211	855	499
65°	2078	565	390
70°	1877	393	273
75°	1633	254	213
80°	1278	191	175
85°	665	154	130

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2495 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.0	5.2
10°-20°	106.2	14.0
20°-30°	146.8	19.4
30°-40°	155.5	20.5
40°-50°	135.7	17.9
50°-60°	96.5	12.7
60°-70°	53.7	7.1
70°-80°	20.6	2.7
80°-90°	3.6	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°	292.0	38.5
0°-40°	447.5	59.1
0°-60°	679.7	89.7
0°-90°	757.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	757.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	419	419	419	419	419	
5°	414	417	413	412	414	39
15°	394	390	375	367	365	111
25°	356	344	316	296	289	164
35°	306	285	243	214	202	192
45°	250	220	166	133	122	192
55°	188	151	93	64	57	168
65°	124	82	34	25	23	123
75°	60	23	9	8	8	63
85°	8	2	2	2	2	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	419.2	419.2	419.2	419.2	419.2
2.5°	416.1	420.3	416.8	417.2	417.6
5°	414.1	417.2	413.0	411.8	413.7
7.5°	411.0	413.4	406.0	403.3	404.4
10°	406.4	407.1	397.1	393.2	392.8
12.5°	400.5	399.4	387.0	380.8	380.4
15°	393.9	390.5	375.3	367.2	365.2
17.5°	385.8	380.4	361.7	351.3	348.1
20°	376.5	369.1	347.8	334.2	329.1
22.5°	367.2	357.1	332.2	315.2	309.7
25°	356.3	344.3	315.5	296.1	288.8
27.5°	344.7	330.3	298.5	276.0	267.0
30°	332.6	315.9	280.6	255.4	245.7
32.5°	319.8	300.8	262.0	234.4	224.3
35°	306.2	285.3	243.0	213.5	202.2
37.5°	292.6	269.4	224.3	192.9	181.3
40°	278.3	253.1	204.2	171.9	159.9
42.5°	264.3	236.4	185.1	152.1	141.3
45°	249.6	219.7	166.1	132.7	122.3
47.5°	234.4	202.2	147.1	114.5	104.0
50°	218.9	185.1	128.5	96.6	87.3
52.5°	203.4	168.1	111.0	79.6	71.4
55°	187.9	150.6	93.1	64.4	56.7
57.5°	172.3	133.5	76.5	50.5	43.5
60°	156.4	116.0	60.5	37.3	35.3
62.5°	140.5	99.0	47.0	30.7	29.1
65°	124.2	81.5	33.8	24.8	23.3
67.5°	107.9	65.6	24.5	19.0	17.9
70°	90.8	50.1	19.0	14.4	13.2
72.5°	74.5	36.1	13.6	10.5	10.1
75°	59.8	23.3	9.3	7.8	7.8
77.5°	45.0	14.0	6.6	5.8	5.8
80°	31.4	8.2	4.7	4.3	4.3
82.5°	19.0	4.3	3.1	2.7	2.7
85°	8.2	2.3	1.9	1.6	1.6
87.5°	1.6	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	14.93	16.38	15.30	16.69	17.01	7.58	9.02	7.94	9.34	9.65
	3H	16.49	17.78	16.87	18.11	18.47	8.14	9.43	8.52	9.76	10.12
	4H	17.02	18.22	17.42	18.57	18.95	8.27	9.47	8.67	9.82	10.20
	6H	17.35	18.46	17.77	18.83	19.22	8.33	9.44	8.75	9.81	10.20
	8H	17.44	18.49	17.86	18.88	19.28	8.34	9.39	8.77	9.78	10.18
	12H	17.46	18.46	17.89	18.85	19.28	8.33	9.33	8.76	9.72	10.15
4H	2H	14.83	16.03	15.23	16.38	16.76	8.14	9.35	8.55	9.70	10.08
	3H	16.50	17.49	16.91	17.89	18.29	8.82	9.80	9.23	10.21	10.61
	4H	17.05	17.93	17.48	18.35	18.79	8.98	9.86	9.41	10.28	10.72
	6H	17.44	18.20	17.90	18.65	19.11	9.09	9.85	9.55	10.30	10.76
	8H	17.55	18.26	18.01	18.70	19.17	9.10	9.81	9.56	10.26	10.73
	12H	17.59	18.23	18.08	18.71	19.18	9.10	9.73	9.59	10.22	10.69
8H	4H	16.95	17.66	17.42	18.11	18.58	9.24	9.96	9.71	10.40	10.87
	6H	17.34	17.92	17.84	18.42	18.90	9.38	9.96	9.88	10.46	10.94
	8H	17.45	17.97	17.96	18.48	18.97	9.41	9.93	9.92	10.44	10.93
	12H	17.51	17.97	18.02	18.47	19.03	9.43	9.89	9.94	10.39	10.95
12H	4H	16.91	17.55	17.40	18.03	18.50	9.26	9.89	9.74	10.37	10.85
	6H	17.28	17.81	17.80	18.32	18.81	9.39	9.92	9.91	10.43	10.92
	8H	17.41	17.88	17.93	18.37	18.94	9.45	9.91	9.96	10.41	10.97