

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: P1056424

Luminaire Tested: S125R3DR-S375D927-X4F0-XX-UDD-F-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056424  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125R3DR-S375D927-X4F0-XX-UDD-F-B  
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

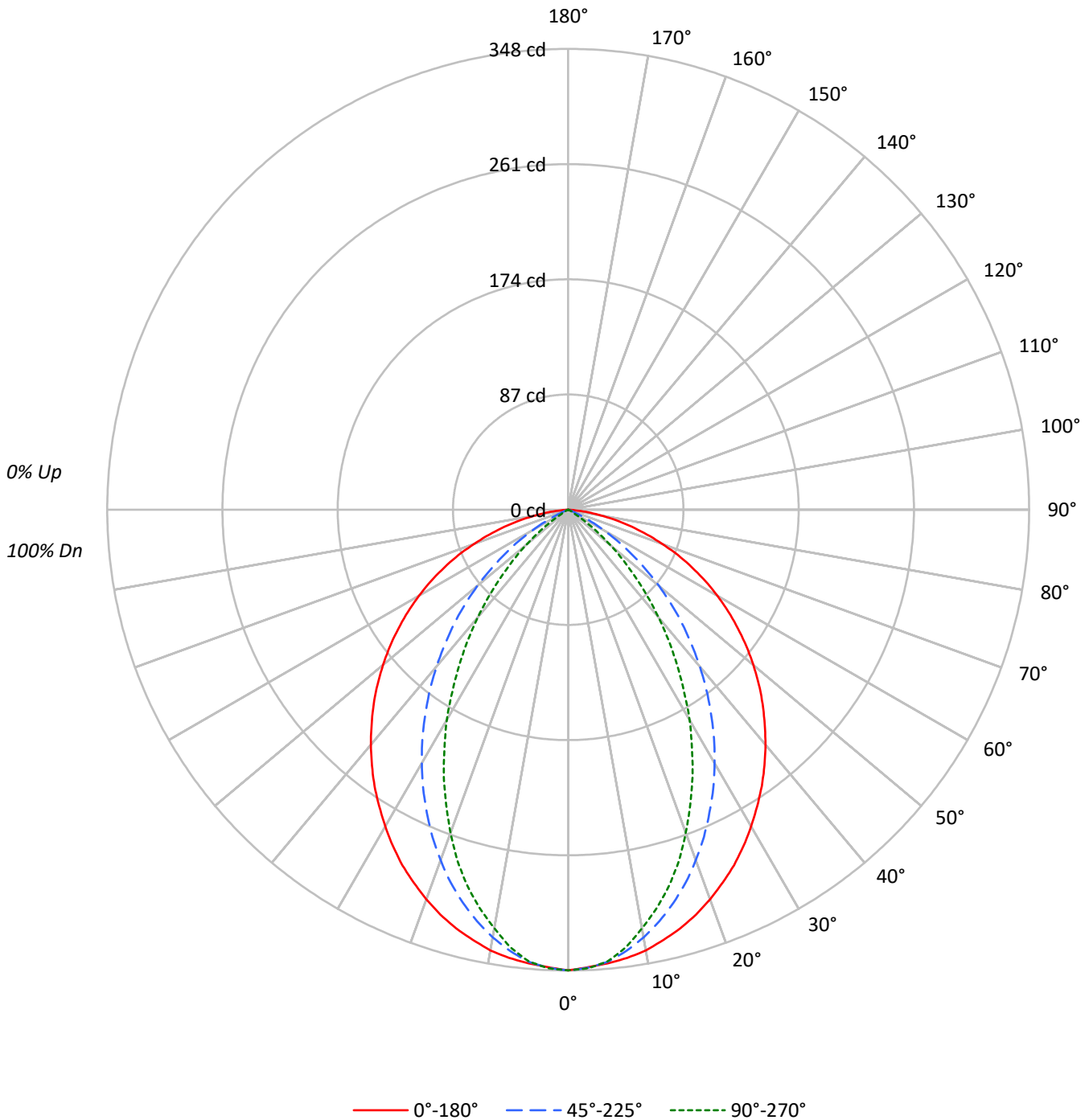
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 563.9 lumens  
Efficiency: N/A  
Efficacy: 44.8 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07  
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	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	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78
3	96	87	81	75	94	86	80	75	83	78	74	80	76	72	78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	61
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51	49
7	72	61	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	45
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

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

	0°	45°	90°
0°	2459	2459	2459
5°	2440	2432	2430
10°	2426	2354	2304
15°	2395	2248	2152
20°	2355	2119	1953
25°	2310	1969	1732
30°	2255	1804	1497
35°	2199	1622	1238
40°	2138	1426	980
45°	2075	1217	710
50°	2006	982	459
55°	1929	719	205
60°	1838	444	58
65°	1725	162	35
70°	1561	58	14
75°	1357	19	8
80°	1038	12	0
85°	479	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2075 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.3	5.7
10°-20°	86.8	15.4
20°-30°	117.4	20.8
30°-40°	120.6	21.4
40°-50°	99.9	17.7
50°-60°	64.1	11.4
60°-70°	31.0	5.5
70°-80°	10.5	1.9
80°-90°	1.3	0.2
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°	236.5	41.9
0°-40°	357.0	63.3
0°-60°	521.1	92.4
0°-90°	563.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	563.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	348	348	348	348	348	
5°	344	346	343	341	342	33
15°	327	323	307	296	294	92
25°	296	282	252	230	222	136
35°	255	230	188	155	143	159
45°	208	173	122	84	71	160
55°	156	115	58	26	17	140
65°	103	57	10	3	2	102
75°	50	11	1	0	0	53
85°	6	0	0	0	0	9
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	347.9	347.9	347.9	347.9	347.9
2.5°	345.8	348.6	346.2	345.8	346.5
5°	343.8	346.5	342.7	340.7	342.4
7.5°	341.4	342.7	336.2	332.7	333.4
10°	337.9	337.6	327.9	322.0	321.0
12.5°	332.7	331.0	318.3	310.0	308.3
15°	327.2	323.1	307.2	296.5	294.1
17.5°	320.7	314.1	295.2	281.4	277.9
20°	313.1	304.1	281.7	264.8	259.6
22.5°	304.8	293.4	267.6	247.6	240.7
25°	296.2	281.7	252.4	229.6	222.1
27.5°	286.5	269.6	237.2	211.4	202.1
30°	276.2	256.9	221.0	192.7	183.4
32.5°	265.5	244.1	204.8	174.1	162.7
35°	254.8	230.3	187.9	155.2	143.4
37.5°	243.4	216.5	171.4	137.2	124.5
40°	231.7	202.4	154.5	118.6	106.2
42.5°	219.6	187.9	137.6	101.0	88.3
45°	207.6	173.4	121.7	84.1	71.0
47.5°	195.2	158.6	105.2	67.6	56.2
50°	182.4	144.1	89.3	52.8	41.7
52.5°	169.6	129.3	73.1	38.3	28.3
55°	156.5	114.8	58.3	25.5	16.6
57.5°	143.4	100.0	44.5	14.1	6.2
60°	130.0	85.9	31.4	4.8	4.1
62.5°	116.9	70.7	19.7	3.8	3.1
65°	103.1	56.9	9.7	2.8	2.1
67.5°	89.6	43.8	4.1	1.7	1.0
70°	75.5	31.7	2.8	1.0	0.7
72.5°	62.4	20.3	1.7	0.7	0.3
75°	49.7	10.7	0.7	0.3	0.3
77.5°	37.2	4.5	0.3	0.3	0.3
80°	25.5	2.1	0.3	0.3	0.0
82.5°	15.2	0.7	0.3	0.3	0.0
85°	5.9	0.0	0.0	0.0	0.0
87.5°	0.3	0.0	0.0	0.0	0.0
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	14.20	15.58	14.56	15.89	16.21	0.00	0.43	0.00	0.74	1.05
	3H	15.74	16.97	16.12	17.30	17.67	0.00	0.19	0.00	0.52	0.88
	4H	16.27	17.41	16.67	17.76	18.14	0.00	0.04	0.00	0.39	0.77
	6H	16.61	17.66	17.02	18.03	18.42	0.00	0.00	0.00	0.24	0.64
	8H	16.69	17.69	17.12	18.08	18.48	0.00	0.00	0.00	0.17	0.57
	12H	16.71	17.66	17.14	18.04	18.47	0.00	0.00	0.00	0.08	0.51
4H	2H	14.00	15.14	14.40	15.49	15.88	0.00	1.06	0.32	1.41	1.80
	3H	15.61	16.55	16.02	16.95	17.35	0.00	0.80	0.28	1.20	1.61
	4H	16.13	16.97	16.57	17.39	17.83	0.00	0.62	0.22	1.04	1.48
	6H	16.51	17.23	16.97	17.67	18.14	0.00	0.44	0.18	0.88	1.35
	8H	16.61	17.28	17.08	17.73	18.20	0.00	0.34	0.14	0.78	1.26
	12H	16.64	17.24	17.13	17.72	18.19	0.00	0.22	0.11	0.70	1.17
8H	4H	16.01	16.68	16.48	17.12	17.59	0.81	1.48	1.28	1.93	2.40
	6H	16.36	16.91	16.86	17.41	17.89	0.72	1.27	1.22	1.77	2.25
	8H	16.46	16.95	16.98	17.46	17.96	0.67	1.16	1.19	1.68	2.17
	12H	16.50	16.94	17.01	17.43	18.00	0.63	1.06	1.14	1.56	2.13
12H	4H	15.96	16.56	16.45	17.04	17.51	0.89	1.48	1.37	1.96	2.44
	6H	16.30	16.79	16.82	17.31	17.80	0.79	1.28	1.31	1.79	2.28
	8H	16.42	16.85	16.93	17.35	17.92	0.75	1.19	1.27	1.68	2.25