

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1056560

Luminaire Tested: S125R3DR-H375D927-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056560  
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-H375D927-X4F0-XX-UDD-FLL-S  
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

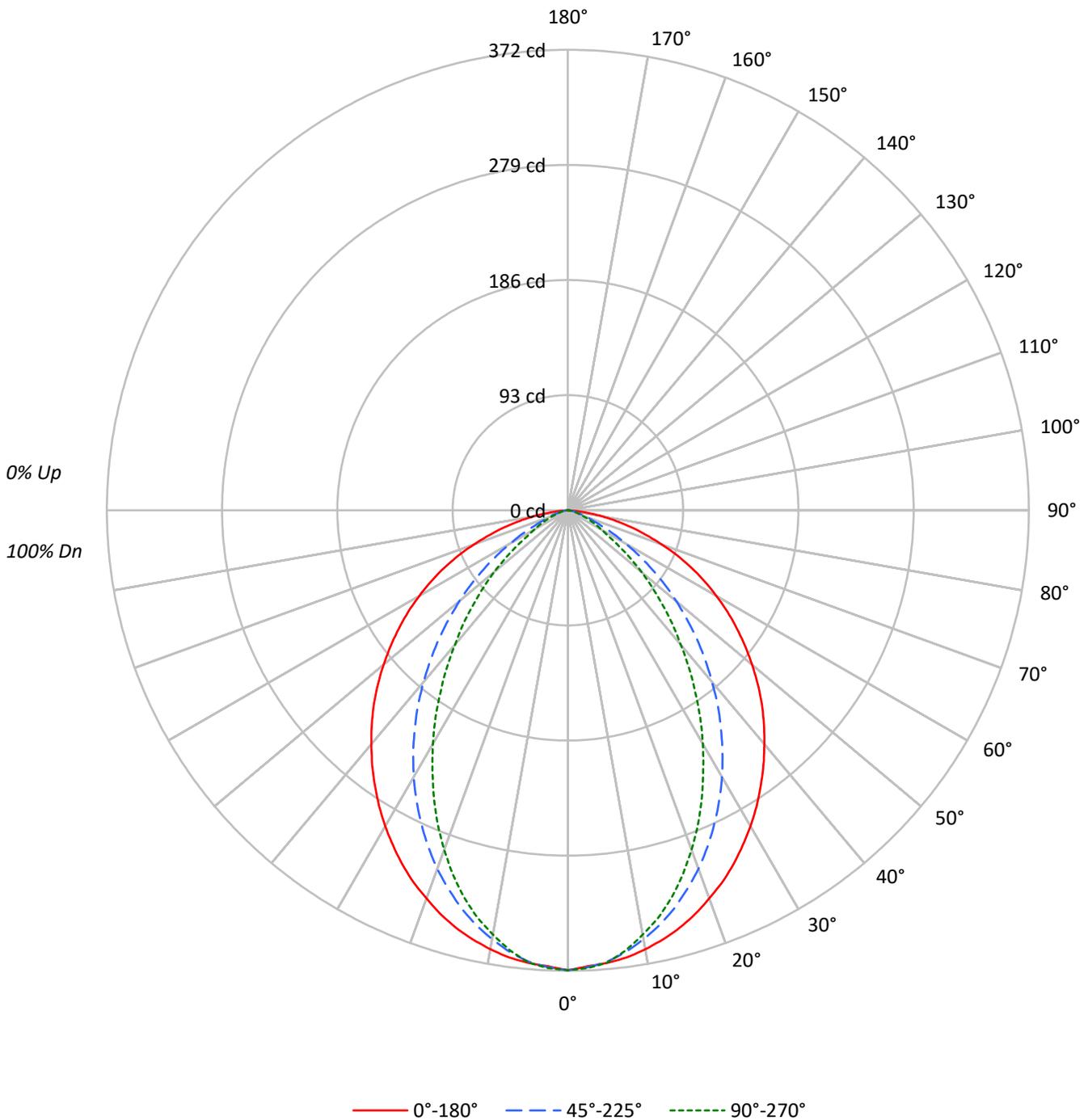
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 671.4 lumens  
Efficiency: N/A  
Efficacy: 57.4 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): 11.7  
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	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											100																	
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88											88																	
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77											77																	
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67											67																	
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59											59																	
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52											52																	
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47											47																	
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42											42																	
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38											38																	
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35											35																	
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32											32																	

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

	0°	45°	90°
0°	2626	2626	2626
5°	2604	2597	2602
10°	2585	2526	2499
15°	2555	2434	2369
20°	2510	2319	2194
25°	2463	2181	1996
30°	2406	2030	1777
35°	2342	1858	1547
40°	2276	1669	1308
45°	2211	1472	1083
50°	2134	1253	851
55°	2052	1018	619
60°	1960	759	443
65°	1842	500	345
70°	1664	349	242
75°	1448	227	188
80°	1136	167	155
85°	584	138	114

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2211 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.6	5.2
10°-20°	94.1	14.0
20°-30°	130.1	19.4
30°-40°	137.8	20.5
40°-50°	120.3	17.9
50°-60°	85.6	12.7
60°-70°	47.6	7.1
70°-80°	18.3	2.7
80°-90°	3.2	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°	258.7	38.5
0°-40°	396.5	59.1
0°-60°	602.4	89.7
0°-90°	671.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	671.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	372	372	372	372	372	
5°	367	370	366	365	367	35
15°	349	346	333	325	324	98
25°	316	305	280	262	256	145
35°	271	253	215	189	179	170
45°	221	195	147	118	108	170
55°	166	134	83	57	50	149
65°	110	72	30	22	21	109
75°	53	21	8	7	7	56
85°	7	2	2	1	1	11
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	371.5	371.5	371.5	371.5	371.5
2.5°	368.7	372.5	369.4	369.8	370.1
5°	367.0	369.8	366.0	364.9	366.7
7.5°	364.3	366.3	359.8	357.4	358.4
10°	360.1	360.8	351.9	348.4	348.1
12.5°	355.0	353.9	342.9	337.4	337.1
15°	349.1	346.0	332.6	325.4	323.7
17.5°	341.9	337.1	320.6	311.3	308.5
20°	333.6	327.1	308.2	296.1	291.7
22.5°	325.4	316.4	294.4	279.3	274.5
25°	315.8	305.1	279.6	262.4	255.9
27.5°	305.4	292.7	264.5	244.6	236.6
30°	294.8	280.0	248.7	226.3	217.7
32.5°	283.4	266.6	232.2	207.8	198.8
35°	271.4	252.8	215.3	189.2	179.2
37.5°	259.3	238.7	198.8	170.9	160.6
40°	246.6	224.3	180.9	152.4	141.7
42.5°	234.2	209.5	164.1	134.8	125.2
45°	221.2	194.7	147.2	117.6	108.3
47.5°	207.8	179.2	130.4	101.5	92.2
50°	194.0	164.1	113.9	85.6	77.4
52.5°	180.2	148.9	98.4	70.5	63.3
55°	166.5	133.5	82.6	57.1	50.2
57.5°	152.7	118.3	67.8	44.7	38.5
60°	138.6	102.8	53.7	33.0	31.3
62.5°	124.5	87.7	41.6	27.2	25.8
65°	110.1	72.2	29.9	22.0	20.6
67.5°	95.6	58.1	21.7	16.9	15.8
70°	80.5	44.4	16.9	12.7	11.7
72.5°	66.0	32.0	12.0	9.3	8.9
75°	53.0	20.6	8.3	6.9	6.9
77.5°	39.9	12.4	5.8	5.2	5.2
80°	27.9	7.2	4.1	3.8	3.8
82.5°	16.9	3.8	2.8	2.4	2.4
85°	7.2	2.1	1.7	1.4	1.4
87.5°	1.4	0.7	0.7	0.7	0.7
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	14.51	15.96	14.88	16.27	16.59	7.15	8.60	7.52	8.91	9.22
	3H	16.07	17.36	16.45	17.69	18.05	7.72	9.00	8.09	9.33	9.69
	4H	16.60	17.80	17.00	18.15	18.53	7.84	9.04	8.24	9.39	9.77
	6H	16.93	18.04	17.35	18.41	18.80	7.91	9.01	8.32	9.38	9.78
	8H	17.02	18.07	17.44	18.46	18.86	7.91	8.96	8.34	9.35	9.76
	12H	17.04	18.05	17.47	18.43	18.86	7.90	8.91	8.33	9.29	9.72
4H	2H	14.41	15.61	14.81	15.96	16.34	7.72	8.92	8.12	9.27	9.65
	3H	16.08	17.07	16.49	17.47	17.87	8.39	9.38	8.80	9.78	10.18
	4H	16.63	17.51	17.06	17.93	18.37	8.55	9.43	8.98	9.85	10.29
	6H	17.02	17.78	17.48	18.23	18.69	8.66	9.43	9.12	9.87	10.33
	8H	17.13	17.84	17.59	18.28	18.75	8.67	9.39	9.14	9.83	10.30
	12H	17.17	17.81	17.66	18.29	18.76	8.68	9.31	9.16	9.79	10.26
8H	4H	16.53	17.24	17.00	17.69	18.16	8.82	9.53	9.28	9.98	10.44
	6H	16.92	17.50	17.42	18.00	18.48	8.95	9.54	9.45	10.03	10.51
	8H	17.03	17.55	17.54	18.06	18.55	8.98	9.51	9.50	10.02	10.51
	12H	17.09	17.55	17.60	18.05	18.61	9.00	9.47	9.52	9.96	10.53
12H	4H	16.49	17.13	16.98	17.61	18.08	8.83	9.47	9.32	9.95	10.42
	6H	16.86	17.39	17.38	17.90	18.39	8.96	9.49	9.48	10.00	10.49
	8H	16.99	17.46	17.51	17.95	18.52	9.02	9.49	9.54	9.98	10.55