

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: P1056426

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

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056426  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-10)  
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-W  
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

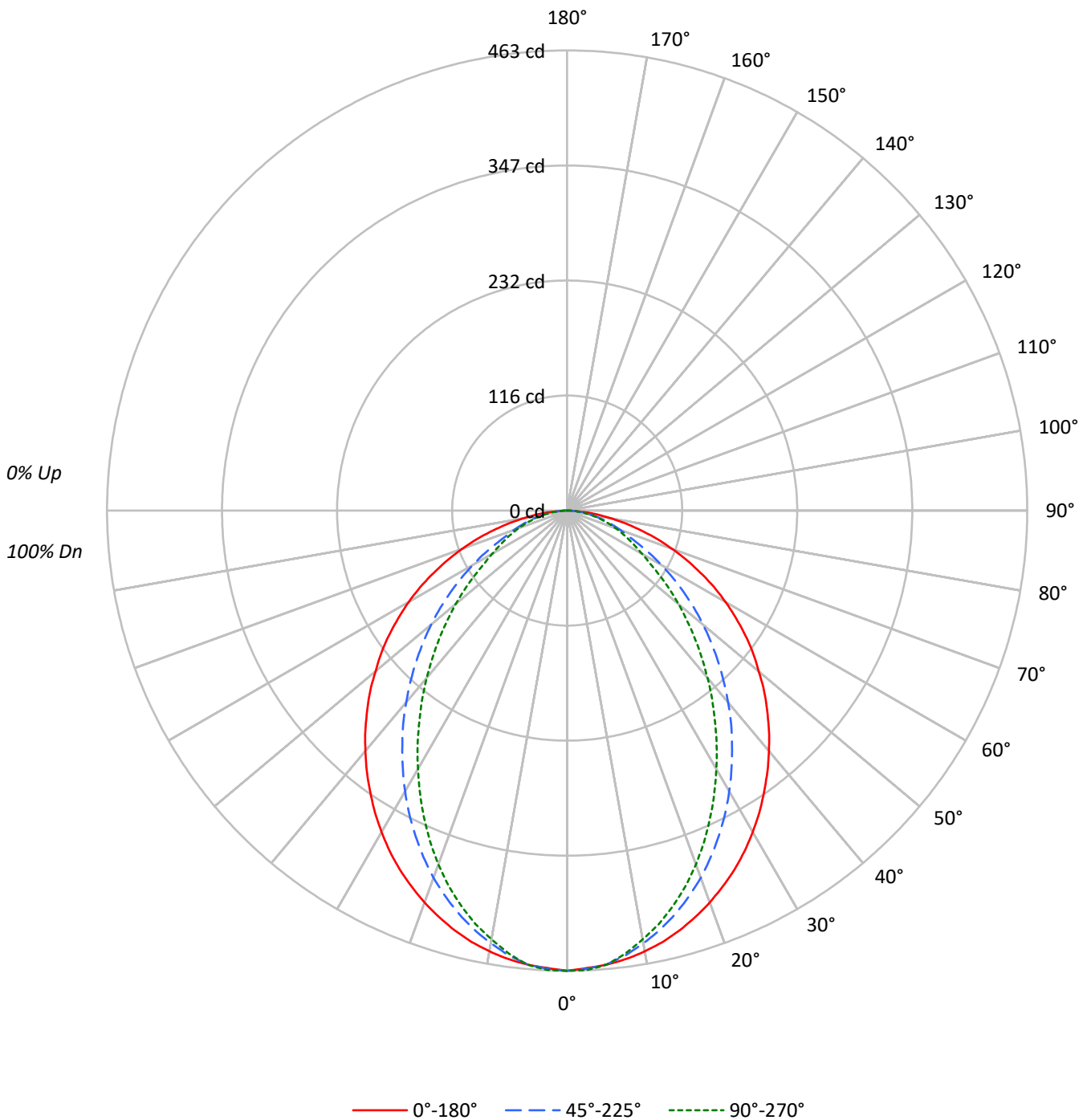
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 981.4 lumens  
Efficiency: N/A  
Efficacy: 77.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17  
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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	28

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

	0°	45°	90°
0°	3274	3274	3274
5°	3254	3252	3254
10°	3232	3173	3143
15°	3200	3076	3013
20°	3157	2957	2850
25°	3109	2816	2658
30°	3048	2663	2451
35°	2982	2497	2238
40°	2914	2326	2027
45°	2844	2147	1817
50°	2768	1964	1608
55°	2699	1764	1398
60°	2603	1550	1229
65°	2474	1315	1142
70°	2323	1176	1069
75°	2100	1084	1008
80°	1824	981	940
85°	1428	868	868

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2844 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.3	4.4
10°-20°	119.0	12.1
20°-30°	168.0	17.1
30°-40°	185.0	18.8
40°-50°	172.6	17.6
50°-60°	137.8	14.0
60°-70°	92.7	9.4
70°-80°	49.4	5.0
80°-90°	13.7	1.4
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°	330.3	33.7
0°-40°	515.3	52.5
0°-60°	825.7	84.1
0°-90°	981.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	981.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	463	463	463	463	463	
5°	459	462	458	457	459	44
15°	437	435	420	413	412	123
25°	399	386	361	345	341	183
35°	346	325	289	266	259	216
45°	284	258	215	189	182	220
55°	219	186	143	120	113	195
65°	148	116	79	70	68	147
75°	77	51	40	37	37	82
85°	18	12	11	11	11	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	463.1	463.1	463.1	463.1	463.1
2.5°	460.7	464.5	461.3	462.0	462.7
5°	458.6	462.4	458.2	456.9	458.6
7.5°	455.1	458.2	451.3	448.2	449.6
10°	450.3	452.4	442.0	437.9	437.9
12.5°	444.5	444.5	432.0	426.2	426.2
15°	437.2	434.8	420.3	413.1	411.7
17.5°	428.9	424.5	407.2	397.9	396.2
20°	419.6	412.4	393.1	381.0	378.9
22.5°	409.3	400.0	377.6	362.7	360.3
25°	398.6	386.5	361.0	345.1	340.7
27.5°	386.5	372.0	344.1	326.2	320.7
30°	373.4	356.9	326.2	306.2	300.3
32.5°	360.0	341.4	307.9	286.5	280.0
35°	345.5	325.2	289.3	266.5	259.3
37.5°	331.0	308.9	271.0	247.2	239.6
40°	315.8	291.7	252.1	227.6	219.6
42.5°	300.7	274.8	233.4	208.6	200.3
45°	284.5	257.6	214.8	188.6	181.7
47.5°	268.9	240.0	196.5	171.0	163.4
50°	251.7	221.7	178.6	153.1	146.2
52.5°	235.8	203.8	160.7	136.9	129.6
55°	219.0	185.8	143.1	120.3	113.4
57.5°	201.4	167.9	126.2	104.8	98.3
60°	184.1	150.0	109.6	90.0	86.9
62.5°	166.5	133.1	94.1	79.0	76.9
65°	147.9	115.5	78.6	69.7	68.3
67.5°	130.3	98.6	66.2	61.0	59.7
70°	112.4	81.7	56.9	52.4	51.7
72.5°	94.8	65.5	47.9	44.8	44.1
75°	76.9	51.0	39.7	37.2	36.9
77.5°	60.3	38.3	31.4	30.3	29.7
80°	44.8	28.6	24.1	23.4	23.1
82.5°	30.7	19.7	17.2	17.2	16.6
85°	17.6	12.1	10.7	11.0	10.7
87.5°	6.6	5.2	4.8	5.2	5.2
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	15.41	16.95	15.77	17.26	17.58	11.79	13.33	12.16	13.64	13.96
	3H	17.19	18.58	17.57	18.90	19.27	13.27	14.65	13.64	14.98	15.34
	4H	17.85	19.15	18.25	19.49	19.87	13.86	15.16	14.26	15.50	15.88
	6H	18.32	19.52	18.73	19.89	20.28	14.32	15.52	14.73	15.89	16.28
	8H	18.48	19.62	18.90	20.01	20.41	14.48	15.62	14.91	16.01	16.41
	12H	18.57	19.67	19.00	20.05	20.48	14.60	15.69	15.03	16.07	16.50
4H	2H	15.54	16.84	15.94	17.19	17.57	12.47	13.77	12.87	14.11	14.49
	3H	17.51	18.59	17.92	18.99	19.39	14.14	15.22	14.55	15.62	16.02
	4H	18.26	19.23	18.69	19.65	20.08	14.85	15.82	15.28	16.24	16.67
	6H	18.85	19.70	19.31	20.14	20.60	15.43	16.28	15.89	16.72	17.18
	8H	19.06	19.85	19.52	20.29	20.76	15.64	16.43	16.10	16.88	17.34
	12H	19.21	19.92	19.69	20.39	20.86	15.80	16.51	16.28	16.99	17.46
8H	4H	18.32	19.11	18.78	19.56	20.02	15.21	16.00	15.67	16.45	16.91
	6H	18.98	19.64	19.48	20.13	20.60	15.91	16.57	16.41	17.06	17.54
	8H	19.23	19.82	19.75	20.33	20.82	16.20	16.79	16.71	17.29	17.78
	12H	19.44	19.96	19.95	20.46	21.02	16.44	16.96	16.95	17.45	18.01
12H	4H	18.31	19.02	18.80	19.50	19.97	15.26	15.97	15.74	16.45	16.92
	6H	18.97	19.56	19.49	20.07	20.56	15.98	16.57	16.50	17.08	17.57
	8H	19.27	19.79	19.78	20.28	20.85	16.33	16.85	16.84	17.34	17.90