

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: P1056415

Luminaire Tested: S125R3DR-S375D835-X4F0-XX-UDD-F-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056415  
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-S375D835-X4F0-XX-UDD-F-B  
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

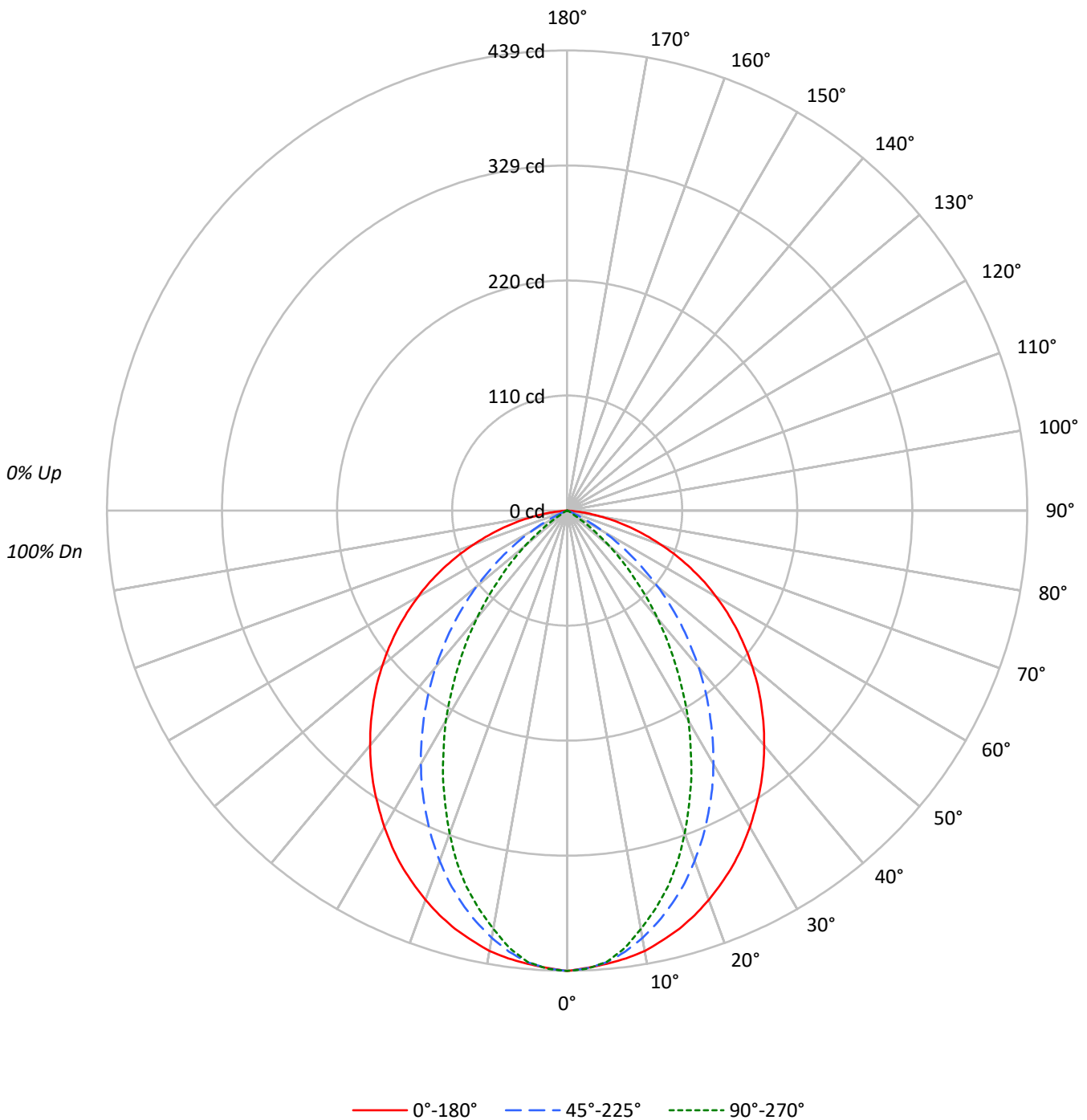
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 711.8 lumens  
Efficiency: N/A  
Efficacy: 56.5 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 (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	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°	3105	3105	3105
5°	3080	3070	3067
10°	3062	2971	2909
15°	3023	2838	2717
20°	2973	2675	2466
25°	2916	2485	2186
30°	2846	2277	1891
35°	2776	2047	1563
40°	2699	1800	1238
45°	2619	1536	897
50°	2533	1239	580
55°	2435	907	258
60°	2320	560	74
65°	2176	204	43
70°	1970	72	19
75°	1713	25	11
80°	1311	16	0
85°	600	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2619 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.8	5.7
10°-20°	109.5	15.4
20°-30°	148.2	20.8
30°-40°	152.2	21.4
40°-50°	126.1	17.7
50°-60°	81.0	11.4
60°-70°	39.1	5.5
70°-80°	13.2	1.9
80°-90°	1.7	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°	298.5	41.9
0°-40°	450.7	63.3
0°-60°	657.8	92.4
0°-90°	711.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	711.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	439	439	439	439	439	
5°	434	437	433	430	432	41
15°	413	408	388	374	371	116
25°	374	356	319	290	280	172
35°	322	291	237	196	181	201
45°	262	219	154	106	90	202
55°	198	145	74	32	21	177
65°	130	72	12	4	3	129
75°	63	14	1	0	0	66
85°	7	0	0	0	0	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	439.2	439.2	439.2	439.2	439.2
2.5°	436.6	440.0	437.0	436.6	437.4
5°	434.0	437.4	432.6	430.0	432.2
7.5°	430.9	432.6	424.4	420.0	420.9
10°	426.6	426.1	413.9	406.5	405.2
12.5°	420.0	417.8	401.7	391.3	389.1
15°	413.1	407.8	387.8	374.3	371.3
17.5°	404.8	396.5	372.6	355.2	350.8
20°	395.2	383.9	355.6	334.3	327.8
22.5°	384.8	370.4	337.8	312.5	303.8
25°	373.9	355.6	318.6	289.9	280.3
27.5°	361.7	340.4	299.5	266.8	255.1
30°	348.6	324.3	279.0	243.3	231.6
32.5°	335.1	308.2	258.5	219.8	205.4
35°	321.7	290.8	237.2	195.9	181.1
37.5°	307.3	273.3	216.3	173.2	157.1
40°	292.5	255.5	195.0	149.7	134.1
42.5°	277.3	237.2	173.7	127.5	111.4
45°	262.0	218.9	153.6	106.2	89.7
47.5°	246.4	200.2	132.8	85.3	70.9
50°	230.3	181.9	112.7	66.6	52.7
52.5°	214.1	163.2	92.3	48.3	35.7
55°	197.6	144.9	73.6	32.2	20.9
57.5°	181.1	126.2	56.1	17.8	7.8
60°	164.1	108.4	39.6	6.1	5.2
62.5°	147.6	89.2	24.8	4.8	3.9
65°	130.1	71.8	12.2	3.5	2.6
67.5°	113.2	55.3	5.2	2.2	1.3
70°	95.3	40.0	3.5	1.3	0.9
72.5°	78.8	25.7	2.2	0.9	0.4
75°	62.7	13.5	0.9	0.4	0.4
77.5°	47.0	5.7	0.4	0.4	0.4
80°	32.2	2.6	0.4	0.4	0.0
82.5°	19.2	0.9	0.4	0.4	0.0
85°	7.4	0.0	0.0	0.0	0.0
87.5°	0.4	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	15.00	16.39	15.37	16.70	17.02	0.00	1.24	0.22	1.55	1.86
	3H	16.55	17.78	16.93	18.11	18.48	0.00	1.00	0.15	1.33	1.70
	4H	17.08	18.22	17.48	18.57	18.95	0.00	0.85	0.11	1.20	1.58
	6H	17.42	18.47	17.83	18.84	19.23	0.00	0.69	0.05	1.06	1.45
	8H	17.50	18.50	17.93	18.89	19.29	0.00	0.59	0.02	0.98	1.39
	12H	17.52	18.47	17.95	18.85	19.28	0.00	0.51	0.00	0.89	1.32
4H	2H	14.81	15.95	15.21	16.30	16.68	0.72	1.87	1.12	2.22	2.60
	3H	16.42	17.36	16.83	17.76	18.16	0.67	1.61	1.08	2.01	2.41
	4H	16.94	17.78	17.38	18.20	18.64	0.59	1.43	1.03	1.85	2.29
	6H	17.32	18.04	17.78	18.48	18.95	0.53	1.25	0.99	1.69	2.16
	8H	17.42	18.09	17.89	18.54	19.01	0.48	1.15	0.94	1.59	2.06
	12H	17.45	18.05	17.94	18.53	19.00	0.43	1.03	0.92	1.51	1.98
8H	4H	16.82	17.49	17.28	17.93	18.40	1.62	2.29	2.09	2.74	3.21
	6H	17.17	17.72	17.67	18.22	18.70	1.53	2.08	2.03	2.58	3.06
	8H	17.27	17.76	17.79	18.27	18.77	1.48	1.97	2.00	2.49	2.98
	12H	17.31	17.75	17.82	18.24	18.81	1.44	1.87	1.95	2.37	2.94
12H	4H	16.77	17.37	17.26	17.85	18.32	1.70	2.29	2.18	2.77	3.25
	6H	17.11	17.60	17.63	18.12	18.61	1.60	2.09	2.12	2.60	3.10
	8H	17.23	17.66	17.74	18.16	18.73	1.56	2.00	2.08	2.49	3.06