

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: P1056416

Luminaire Tested: S125R3DRP-S375D835-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056416  
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: S125R3DRP-S375D835-X4F0-XX-UDD-F-S  
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

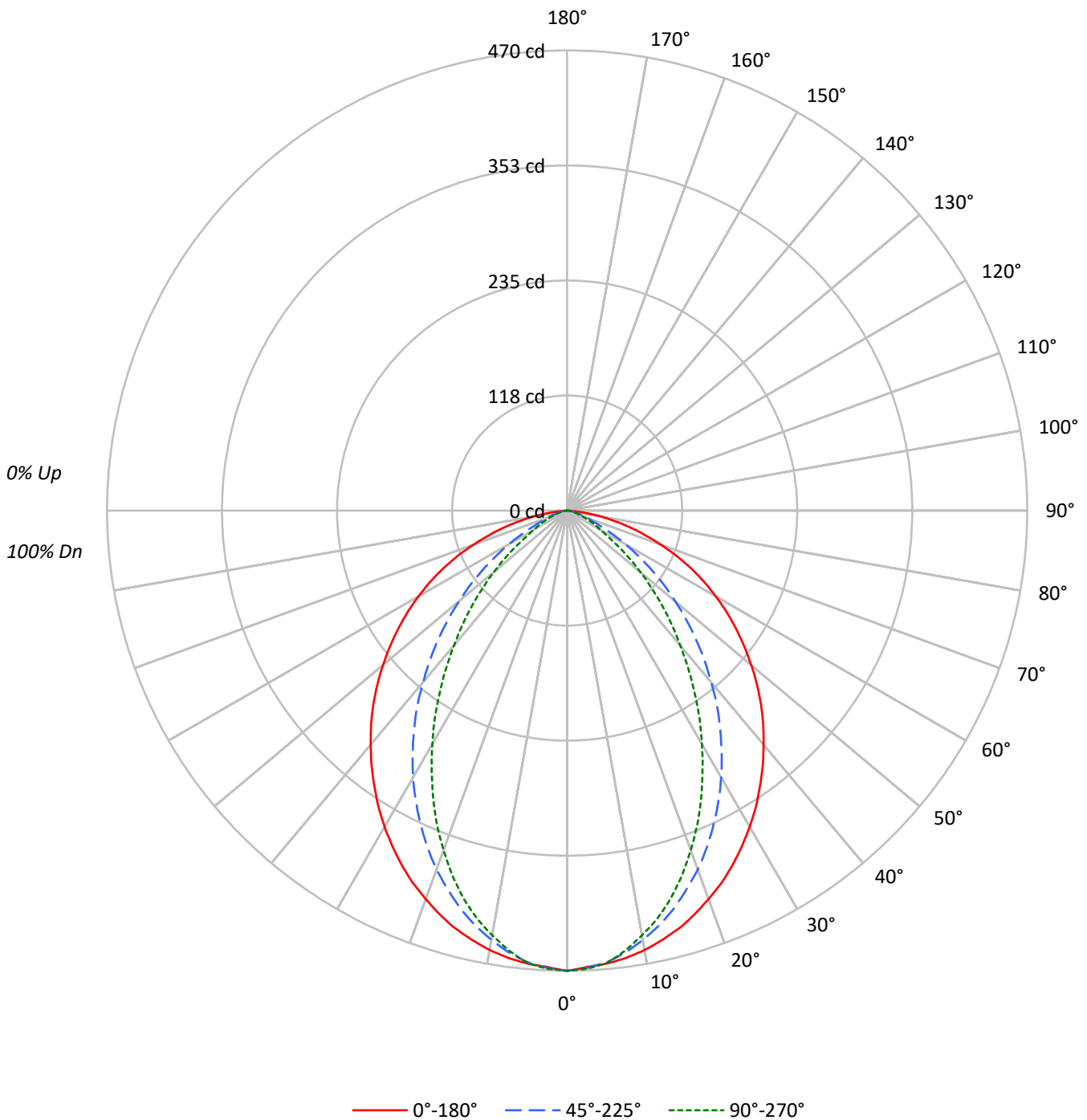
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 849.6 lumens  
Efficiency: N/A  
Efficacy: 67.4 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): 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	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°	3323	3323	3323
5°	3296	3286	3293
10°	3271	3197	3162
15°	3233	3080	2998
20°	3176	2934	2777
25°	3117	2760	2526
30°	3045	2569	2249
35°	2964	2352	1957
40°	2880	2112	1655
45°	2798	1863	1371
50°	2700	1585	1077
55°	2597	1288	783
60°	2480	960	560
65°	2330	634	437
70°	2106	440	306
75°	1830	284	238
80°	1437	212	195
85°	738	178	138

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2798 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.8	5.2
10°-20°	119.0	14.0
20°-30°	164.6	19.4
30°-40°	174.4	20.5
40°-50°	152.2	17.9
50°-60°	108.3	12.7
60°-70°	60.2	7.1
70°-80°	23.1	2.7
80°-90°	4.0	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°	327.4	38.5
0°-40°	501.8	59.1
0°-60°	762.3	89.7
0°-90°	849.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	849.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	470	470	470	470	470	
5°	464	468	463	462	464	44
15°	442	438	421	412	410	124
25°	400	386	354	332	324	184
35°	343	320	272	239	227	215
45°	280	246	186	149	137	216
55°	211	169	104	72	64	188
65°	139	91	38	28	26	138
75°	67	26	10	9	9	71
85°	9	3	2	2	2	14
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	470.1	470.1	470.1	470.1	470.1
2.5°	466.6	471.4	467.5	467.9	468.3
5°	464.4	467.9	463.1	461.8	464.0
7.5°	460.9	463.6	455.3	452.2	453.5
10°	455.7	456.6	445.3	440.9	440.5
12.5°	449.2	447.9	434.0	427.0	426.6
15°	441.8	437.9	420.9	411.8	409.6
17.5°	432.6	426.6	405.7	393.9	390.4
20°	422.2	413.9	390.0	374.8	369.1
22.5°	411.8	400.4	372.6	353.4	347.3
25°	399.6	386.1	353.9	332.1	323.8
27.5°	386.5	370.4	334.7	309.5	299.5
30°	373.0	354.3	314.7	286.4	275.5
32.5°	358.7	337.3	293.8	262.9	251.6
35°	343.4	319.9	272.5	239.4	226.8
37.5°	328.2	302.1	251.6	216.3	203.3
40°	312.1	283.8	228.9	192.8	179.3
42.5°	296.4	265.1	207.6	170.6	158.4
45°	279.9	246.4	186.3	148.9	137.1
47.5°	262.9	226.8	165.0	128.4	116.6
50°	245.5	207.6	144.1	108.4	97.9
52.5°	228.1	188.5	124.5	89.2	80.1
55°	210.7	168.9	104.5	72.3	63.5
57.5°	193.3	149.7	85.7	56.6	48.7
60°	175.4	130.1	67.9	41.8	39.6
62.5°	157.6	111.0	52.7	34.4	32.6
65°	139.3	91.4	37.9	27.9	26.1
67.5°	121.0	73.6	27.4	21.3	20.0
70°	101.9	56.1	21.3	16.1	14.8
72.5°	83.6	40.5	15.2	11.8	11.3
75°	67.0	26.1	10.4	8.7	8.7
77.5°	50.5	15.7	7.4	6.5	6.5
80°	35.3	9.1	5.2	4.8	4.8
82.5°	21.3	4.8	3.5	3.0	3.0
85°	9.1	2.6	2.2	1.7	1.7
87.5°	1.7	0.9	0.9	0.9	0.9
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	15.33	16.78	15.70	17.09	17.41	7.97	9.42	8.34	9.73	10.05
	3H	16.89	18.18	17.27	18.51	18.87	8.53	9.82	8.91	10.15	10.51
	4H	17.41	18.62	17.81	18.97	19.35	8.66	9.86	9.06	10.21	10.59
	6H	17.75	18.86	18.17	19.23	19.62	8.72	9.83	9.14	10.20	10.59
	8H	17.83	18.89	18.26	19.28	19.68	8.73	9.78	9.16	10.17	10.57
	12H	17.86	18.86	18.29	19.25	19.68	8.72	9.72	9.15	10.10	10.53
4H	2H	15.23	16.43	15.63	16.78	17.16	8.54	9.74	8.94	10.09	10.47
	3H	16.90	17.88	17.31	18.29	18.69	9.21	10.20	9.62	10.60	11.00
	4H	17.45	18.33	17.88	18.75	19.19	9.37	10.25	9.80	10.67	11.11
	6H	17.84	18.60	18.30	19.05	19.51	9.48	10.24	9.94	10.69	11.15
	8H	17.94	18.66	18.41	19.10	19.57	9.49	10.20	9.95	10.65	11.12
	12H	17.99	18.62	18.47	19.10	19.58	9.49	10.12	9.97	10.60	11.08
8H	4H	17.35	18.06	17.82	18.51	18.98	9.64	10.35	10.10	10.79	11.26
	6H	17.74	18.32	18.24	18.81	19.29	9.77	10.35	10.27	10.85	11.33
	8H	17.84	18.37	18.36	18.88	19.37	9.79	10.32	10.31	10.83	11.32
	12H	17.91	18.37	18.42	18.86	19.43	9.81	10.28	10.33	10.77	11.34
12H	4H	17.31	17.95	17.80	18.43	18.90	9.65	10.28	10.13	10.76	11.24
	6H	17.68	18.21	18.20	18.72	19.21	9.78	10.31	10.30	10.82	11.31
	8H	17.81	18.27	18.32	18.77	19.34	9.84	10.30	10.35	10.79	11.36