

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: P1056417

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

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056417  
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-S375D835-X4F0-XX-UDD-F-W  
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

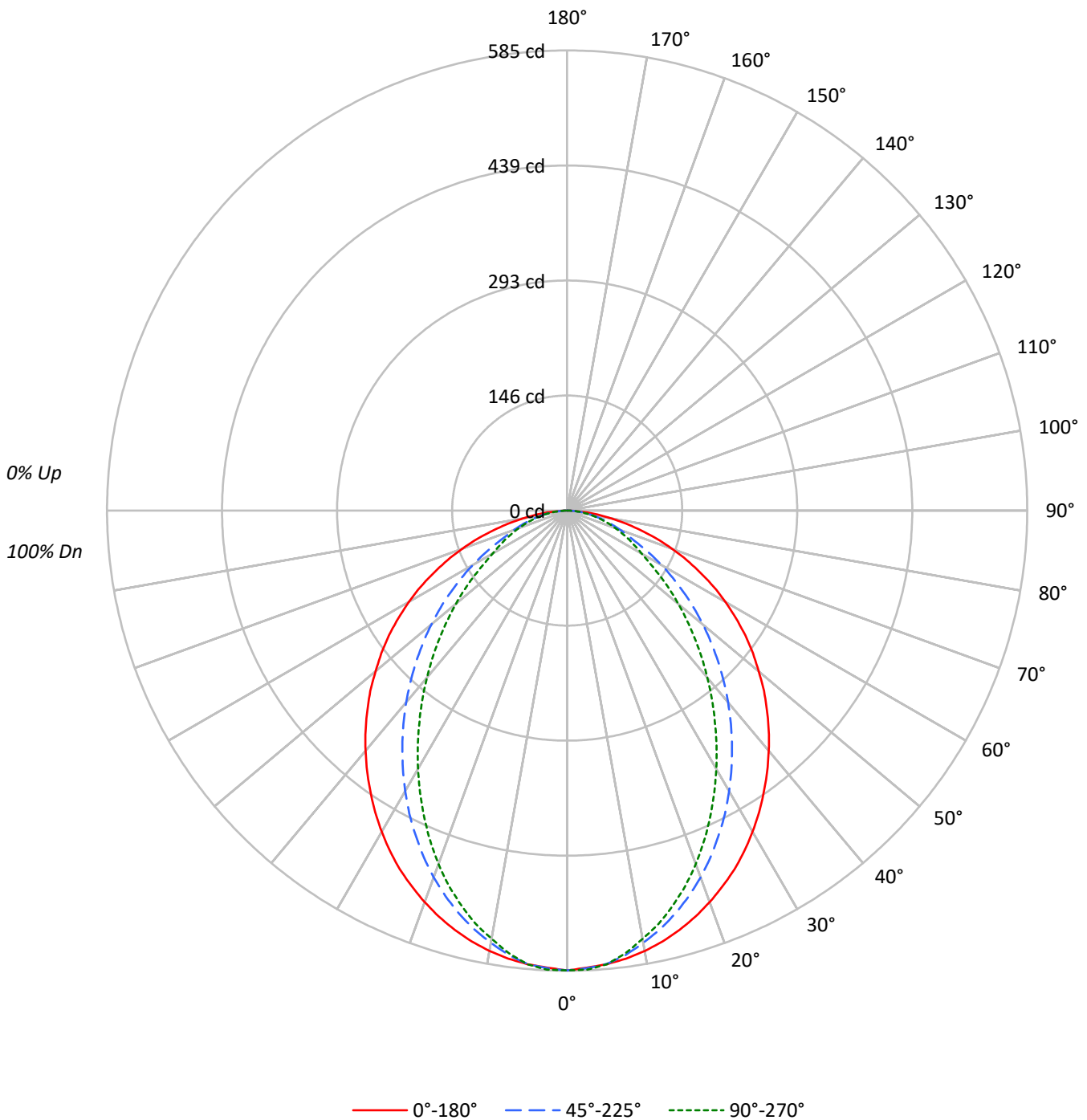
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1238.9 lumens  
Efficiency: N/A  
Efficacy: 98.3 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 (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	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°	4133	4133	4133
5°	4108	4105	4108
10°	4080	4006	3968
15°	4039	3883	3804
20°	3985	3733	3598
25°	3925	3555	3354
30°	3848	3362	3095
35°	3764	3152	2825
40°	3679	2936	2559
45°	3590	2711	2293
50°	3494	2480	2029
55°	3407	2226	1765
60°	3286	1957	1551
65°	3123	1659	1442
70°	2933	1484	1350
75°	2652	1368	1273
80°	2304	1242	1189
85°	1801	1095	1095

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3590 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.7	4.4
10°-20°	150.2	12.1
20°-30°	212.1	17.1
30°-40°	233.5	18.8
40°-50°	217.8	17.6
50°-60°	173.9	14.0
60°-70°	117.0	9.4
70°-80°	62.3	5.0
80°-90°	17.3	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°	417.0	33.7
0°-40°	650.5	52.5
0°-60°	1042.3	84.1
0°-90°	1238.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1238.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	585	585	585	585	585	
5°	579	584	578	577	579	55
15°	552	549	531	521	520	156
25°	503	488	456	436	430	232
35°	436	410	365	336	327	273
45°	359	325	271	238	229	277
55°	276	235	181	152	143	247
65°	187	146	99	88	86	185
75°	97	64	50	47	47	103
85°	22	15	14	14	14	27
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	584.6	584.6	584.6	584.6	584.6
2.5°	581.5	586.3	582.4	583.2	584.1
5°	578.9	583.7	578.5	576.7	578.9
7.5°	574.5	578.5	569.8	565.8	567.6
10°	568.4	571.1	558.0	552.8	552.8
12.5°	561.0	561.0	545.4	538.0	538.0
15°	551.9	548.9	530.6	521.4	519.7
17.5°	541.5	535.8	514.0	502.3	500.1
20°	529.7	520.6	496.2	481.0	478.3
22.5°	516.7	504.9	476.6	457.9	454.8
25°	503.2	487.9	455.7	435.7	430.0
27.5°	487.9	469.6	434.4	411.8	404.8
30°	471.4	450.5	411.8	386.5	379.1
32.5°	454.4	430.9	388.7	361.7	353.4
35°	436.1	410.4	365.2	336.5	327.3
37.5°	417.8	390.0	342.1	312.1	302.5
40°	398.7	368.2	318.2	287.3	277.3
42.5°	379.5	346.9	294.7	263.3	252.9
45°	359.1	325.1	271.2	238.1	229.4
47.5°	339.5	302.9	248.1	215.9	206.3
50°	317.7	279.9	225.5	193.3	184.5
52.5°	297.7	257.2	202.8	172.8	163.7
55°	276.4	234.6	180.6	151.9	143.2
57.5°	254.2	212.0	159.3	132.3	124.0
60°	232.4	189.3	138.4	113.6	109.7
62.5°	210.2	168.0	118.8	99.7	97.1
65°	186.7	145.8	99.2	87.9	86.2
67.5°	164.5	124.5	83.6	77.0	75.3
70°	141.9	103.2	71.8	66.2	65.3
72.5°	119.7	82.7	60.5	56.6	55.7
75°	97.1	64.4	50.1	47.0	46.6
77.5°	76.2	48.3	39.6	38.3	37.4
80°	56.6	36.1	30.5	29.6	29.2
82.5°	38.7	24.8	21.8	21.8	20.9
85°	22.2	15.2	13.5	13.9	13.5
87.5°	8.3	6.5	6.1	6.5	6.5
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	16.22	17.76	16.58	18.07	18.39	12.60	14.14	12.96	14.45	14.77
	3H	18.00	19.39	18.38	19.71	20.08	14.08	15.46	14.45	15.79	16.15
	4H	18.66	19.96	19.06	20.30	20.68	14.67	15.96	15.07	16.31	16.69
	6H	19.13	20.33	19.55	20.70	21.09	15.13	16.33	15.54	16.70	17.09
	8H	19.29	20.43	19.71	20.82	21.22	15.29	16.43	15.72	16.82	17.22
	12H	19.38	20.48	19.81	20.86	21.29	15.40	16.50	15.83	16.88	17.31
4H	2H	16.35	17.65	16.75	18.00	18.38	13.28	14.57	13.67	14.92	15.30
	3H	18.32	19.40	18.73	19.80	20.20	14.95	16.03	15.36	16.43	16.83
	4H	19.07	20.04	19.50	20.46	20.90	15.66	16.63	16.09	17.05	17.48
	6H	19.66	20.51	20.12	20.95	21.41	16.24	17.09	16.70	17.53	17.99
	8H	19.87	20.66	20.33	21.11	21.57	16.45	17.24	16.91	17.69	18.15
	12H	20.02	20.73	20.50	21.20	21.67	16.61	17.32	17.09	17.80	18.27
8H	4H	19.13	19.92	19.59	20.37	20.84	16.02	16.81	16.48	17.26	17.72
	6H	19.79	20.45	20.29	20.94	21.41	16.72	17.38	17.22	17.87	18.35
	8H	20.04	20.63	20.56	21.14	21.63	17.01	17.60	17.52	18.11	18.59
	12H	20.25	20.77	20.76	21.27	21.83	17.25	17.77	17.76	18.26	18.83
12H	4H	19.12	19.83	19.61	20.31	20.78	16.07	16.78	16.55	17.26	17.73
	6H	19.79	20.38	20.30	20.88	21.37	16.79	17.39	17.31	17.89	18.38
	8H	20.08	20.60	20.59	21.09	21.66	17.14	17.66	17.65	18.15	18.72