

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: P1056438

Luminaire Tested: S125R3DR-S375D950-X4F0-XX-UDD-F-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056438  
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-S375D950-X4F0-XX-UDD-F-W  
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

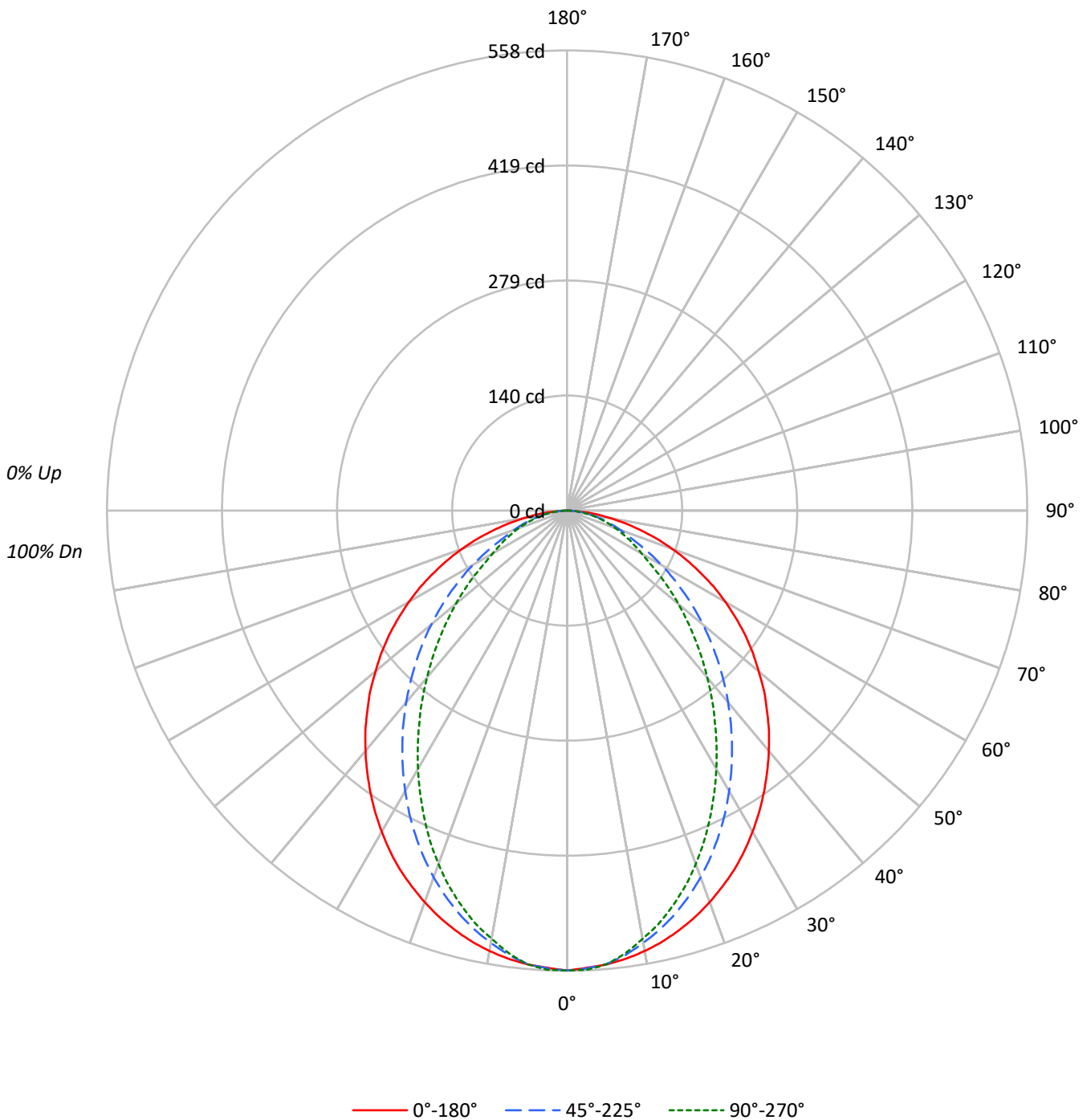
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1182.0 lumens  
Efficiency: N/A  
Efficacy: 93.8 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	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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86													86															
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73													73															
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63													63															
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55													55															
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48													48															
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43													43															
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38													38															
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34													34															
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31													31															
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28													28															

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

	0°	45°	90°
0°	3943	3943	3943
5°	3919	3916	3919
10°	3893	3821	3786
15°	3853	3705	3629
20°	3801	3561	3433
25°	3744	3392	3200
30°	3671	3206	2953
35°	3591	3007	2695
40°	3510	2801	2441
45°	3425	2586	2187
50°	3333	2366	1937
55°	3250	2124	1684
60°	3135	1866	1479
65°	2979	1584	1375
70°	2799	1416	1288
75°	2529	1306	1213
80°	2198	1185	1132
85°	1720	1046	1046

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3425 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.2	4.4
10°-20°	143.3	12.1
20°-30°	202.4	17.1
30°-40°	222.8	18.8
40°-50°	207.8	17.6
50°-60°	165.9	14.0
60°-70°	111.6	9.4
70°-80°	59.5	5.0
80°-90°	16.5	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°	397.8	33.7
0°-40°	620.6	52.5
0°-60°	994.3	84.1
0°-90°	1182.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1182.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	558	558	558	558	558	
5°	552	557	552	550	552	52
15°	526	524	506	498	496	148
25°	480	466	435	416	410	221
35°	416	392	348	321	312	260
45°	343	310	259	227	219	265
55°	264	224	172	145	137	235
65°	178	139	95	84	82	177
75°	93	62	48	45	44	99
85°	21	14	13	13	13	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	557.7	557.7	557.7	557.7	557.7
2.5°	554.8	559.3	555.6	556.4	557.2
5°	552.3	556.8	551.8	550.2	552.3
7.5°	548.1	551.8	543.5	539.8	541.5
10°	542.3	544.8	532.3	527.4	527.4
12.5°	535.2	535.2	520.3	513.2	513.2
15°	526.5	523.6	506.2	497.5	495.8
17.5°	516.6	511.2	490.4	479.2	477.1
20°	505.3	496.6	473.4	458.8	456.3
22.5°	492.9	481.7	454.7	436.8	433.9
25°	480.0	465.5	434.8	415.7	410.3
27.5°	465.5	448.0	414.4	392.8	386.2
30°	449.7	429.8	392.8	368.7	361.7
32.5°	433.5	411.1	370.8	345.1	337.2
35°	416.1	391.6	348.4	321.0	312.3
37.5°	398.6	372.1	326.4	297.7	288.6
40°	380.4	351.3	303.5	274.1	264.5
42.5°	362.1	330.9	281.1	251.2	241.3
45°	342.6	310.2	258.7	227.1	218.8
47.5°	323.9	289.0	236.7	206.0	196.8
50°	303.1	267.0	215.1	184.4	176.1
52.5°	284.0	245.4	193.5	164.8	156.1
55°	263.7	223.8	172.3	144.9	136.6
57.5°	242.5	202.2	152.0	126.2	118.3
60°	221.7	180.6	132.0	108.4	104.6
62.5°	200.6	160.3	113.4	95.1	92.6
65°	178.1	139.1	94.7	83.9	82.2
67.5°	157.0	118.8	79.7	73.5	71.8
70°	135.4	98.4	68.5	63.1	62.3
72.5°	114.2	78.9	57.7	54.0	53.2
75°	92.6	61.5	47.8	44.8	44.4
77.5°	72.7	46.1	37.8	36.5	35.7
80°	54.0	34.5	29.1	28.2	27.8
82.5°	37.0	23.7	20.8	20.8	19.9
85°	21.2	14.5	12.9	13.3	12.9
87.5°	7.9	6.2	5.8	6.2	6.2
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	16.05	17.59	16.42	17.91	18.22	12.43	13.97	12.80	14.29	14.60
	3H	17.84	19.22	18.22	19.55	19.91	13.91	15.29	14.29	15.62	15.98
	4H	18.49	19.79	18.89	20.14	20.52	14.50	15.80	14.90	16.15	16.53
	6H	18.97	20.17	19.38	20.54	20.93	14.96	16.16	15.38	16.53	16.92
	8H	19.12	20.27	19.55	20.66	21.06	15.12	16.27	15.55	16.66	17.06
	12H	19.22	20.32	19.65	20.70	21.13	15.24	16.33	15.67	16.72	17.15
4H	2H	16.19	17.49	16.59	17.84	18.21	13.11	14.41	13.51	14.76	15.14
	3H	18.16	19.24	18.57	19.64	20.04	14.79	15.87	15.20	16.27	16.67
	4H	18.90	19.88	19.34	20.29	20.73	15.49	16.47	15.92	16.88	17.32
	6H	19.50	20.35	19.96	20.79	21.25	16.08	16.93	16.53	17.37	17.83
	8H	19.71	20.50	20.17	20.94	21.41	16.29	17.08	16.75	17.52	17.99
	12H	19.85	20.56	20.34	21.04	21.51	16.45	17.16	16.93	17.63	18.10
8H	4H	18.97	19.76	19.43	20.20	20.67	15.86	16.65	16.32	17.09	17.56
	6H	19.63	20.28	20.12	20.78	21.25	16.56	17.21	17.05	17.70	18.18
	8H	19.88	20.47	20.40	20.98	21.47	16.84	17.43	17.36	17.94	18.43
	12H	20.09	20.61	20.60	21.10	21.67	17.08	17.61	17.59	18.10	18.66
12H	4H	18.96	19.67	19.44	20.15	20.62	15.90	16.61	16.39	17.09	17.56
	6H	19.62	20.21	20.14	20.72	21.21	16.63	17.22	17.14	17.73	18.22
	8H	19.92	20.44	20.43	20.93	21.49	16.97	17.49	17.48	17.99	18.55