

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: P1056456

Luminaire Tested: S125R3DR-S610D930-X4F0-XX-UDD-F-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056456  
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-S610D930-X4F0-XX-UDD-F-W  
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

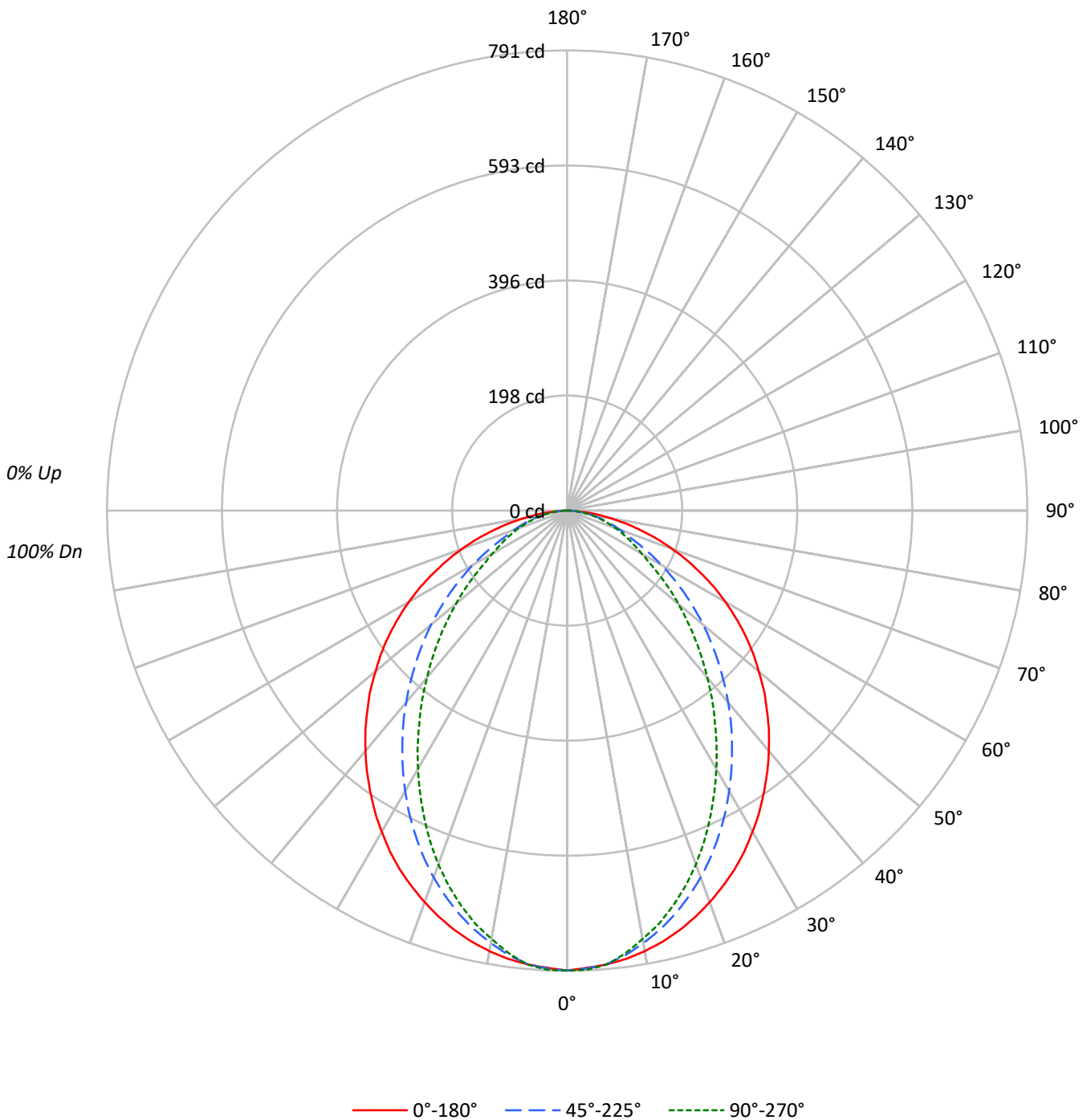
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1675.9 lumens  
Efficiency: N/A  
Efficacy: 87.7 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): 19.1  
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°	5590	5590	5590
5°	5557	5553	5557
10°	5519	5418	5367
15°	5464	5253	5145
20°	5390	5049	4867
25°	5309	4808	4537
30°	5205	4547	4186
35°	5091	4263	3821
40°	4977	3972	3461
45°	4856	3667	3102
50°	4727	3354	2745
55°	4608	3011	2387
60°	4445	2647	2098
65°	4225	2245	1950
70°	3966	2007	1825
75°	3586	1849	1721
80°	3114	1677	1604
85°	2433	1484	1484

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4856 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.0	4.4
10°-20°	203.1	12.1
20°-30°	287.0	17.1
30°-40°	315.9	18.8
40°-50°	294.7	17.6
50°-60°	235.2	14.0
60°-70°	158.3	9.4
70°-80°	84.3	5.0
80°-90°	23.4	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°	564.1	33.7
0°-40°	880.0	52.5
0°-60°	1409.9	84.1
0°-90°	1675.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1675.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	791	791	791	791	791	
5°	783	790	782	780	783	74
15°	747	742	718	705	703	210
25°	681	660	616	589	582	313
35°	590	555	494	455	443	369
45°	486	440	367	322	310	375
55°	374	317	244	206	194	334
65°	253	197	134	119	117	251
75°	131	87	68	64	63	140
85°	30	21	18	19	18	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	790.7	790.7	790.7	790.7	790.7
2.5°	786.6	793.1	787.8	788.9	790.1
5°	783.1	789.5	782.5	780.1	783.1
7.5°	777.2	782.5	770.7	765.4	767.7
10°	768.9	772.5	754.8	747.7	747.7
12.5°	758.9	758.9	737.7	727.7	727.7
15°	746.6	742.4	717.7	705.3	703.0
17.5°	732.4	724.8	695.3	679.4	676.5
20°	716.5	704.2	671.2	650.6	647.0
22.5°	698.9	683.0	644.7	619.4	615.3
25°	680.6	660.0	616.4	589.4	581.7
27.5°	660.0	635.3	587.6	557.0	547.5
30°	637.6	609.4	557.0	522.8	512.8
32.5°	614.7	582.9	525.8	489.3	478.1
35°	589.9	555.2	494.0	455.1	442.7
37.5°	565.2	527.5	462.8	422.1	409.2
40°	539.3	498.1	430.4	388.6	375.0
42.5°	513.4	469.2	398.6	356.2	342.1
45°	485.7	439.8	366.8	322.1	310.3
47.5°	459.2	409.8	335.6	292.0	279.1
50°	429.8	378.6	305.0	261.4	249.6
52.5°	402.7	348.0	274.4	233.7	221.4
55°	373.9	317.3	244.3	205.5	193.7
57.5°	343.8	286.7	215.5	179.0	167.8
60°	314.4	256.1	187.2	153.7	148.4
62.5°	284.4	227.3	160.7	134.8	131.3
65°	252.6	197.2	134.2	118.9	116.6
67.5°	222.6	168.4	113.0	104.2	101.9
70°	191.9	139.5	97.1	89.5	88.3
72.5°	161.9	111.9	81.8	76.5	75.4
75°	131.3	87.1	67.7	63.6	63.0
77.5°	103.0	65.4	53.6	51.8	50.6
80°	76.5	48.9	41.2	40.0	39.4
82.5°	52.4	33.6	29.4	29.4	28.3
85°	30.0	20.6	18.3	18.8	18.3
87.5°	11.2	8.8	8.2	8.8	8.8
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	17.27	18.81	17.63	19.12	19.43	13.65	15.19	14.02	15.50	15.82
	3H	19.05	20.44	19.43	20.76	21.13	15.13	16.51	15.50	16.84	17.20
	4H	19.71	21.00	20.11	21.35	21.73	15.72	17.02	16.12	17.36	17.74
	6H	20.18	21.38	20.59	21.75	22.14	16.18	17.38	16.59	17.75	18.14
	8H	20.34	21.48	20.76	21.87	22.27	16.34	17.48	16.76	17.87	18.27
	12H	20.43	21.53	20.86	21.91	22.34	16.45	17.55	16.88	17.93	18.36
4H	2H	17.40	18.70	17.80	19.05	19.43	14.33	15.63	14.73	15.97	16.35
	3H	19.37	20.45	19.78	20.85	21.25	16.00	17.08	16.41	17.48	17.88
	4H	20.12	21.09	20.55	21.51	21.94	16.71	17.68	17.14	18.10	18.53
	6H	20.71	21.56	21.17	22.00	22.46	17.29	18.14	17.75	18.58	19.04
	8H	20.92	21.71	21.38	22.15	22.62	17.50	18.29	17.96	18.74	19.20
	12H	21.07	21.77	21.55	22.25	22.72	17.66	18.37	18.14	18.85	19.32
8H	4H	20.18	20.97	20.64	21.42	21.88	17.07	17.86	17.53	18.31	18.77
	6H	20.84	21.50	21.34	21.99	22.46	17.77	18.43	18.27	18.92	19.40
	8H	21.09	21.68	21.61	22.19	22.68	18.06	18.64	18.57	19.15	19.64
	12H	21.30	21.82	21.81	22.32	22.88	18.30	18.82	18.81	19.31	19.87
12H	4H	20.17	20.88	20.65	21.36	21.83	17.12	17.83	17.60	18.31	18.78
	6H	20.83	21.42	21.35	21.93	22.42	17.84	18.43	18.36	18.94	19.43
	8H	21.13	21.65	21.64	22.14	22.71	18.19	18.71	18.70	19.20	19.76