

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: P1056458

Luminaire Tested: S125R3DR-S610D935-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056458  
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: S125R3DR-S610D935-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, 90 CRI LEDS  
Ballast/Driver: -

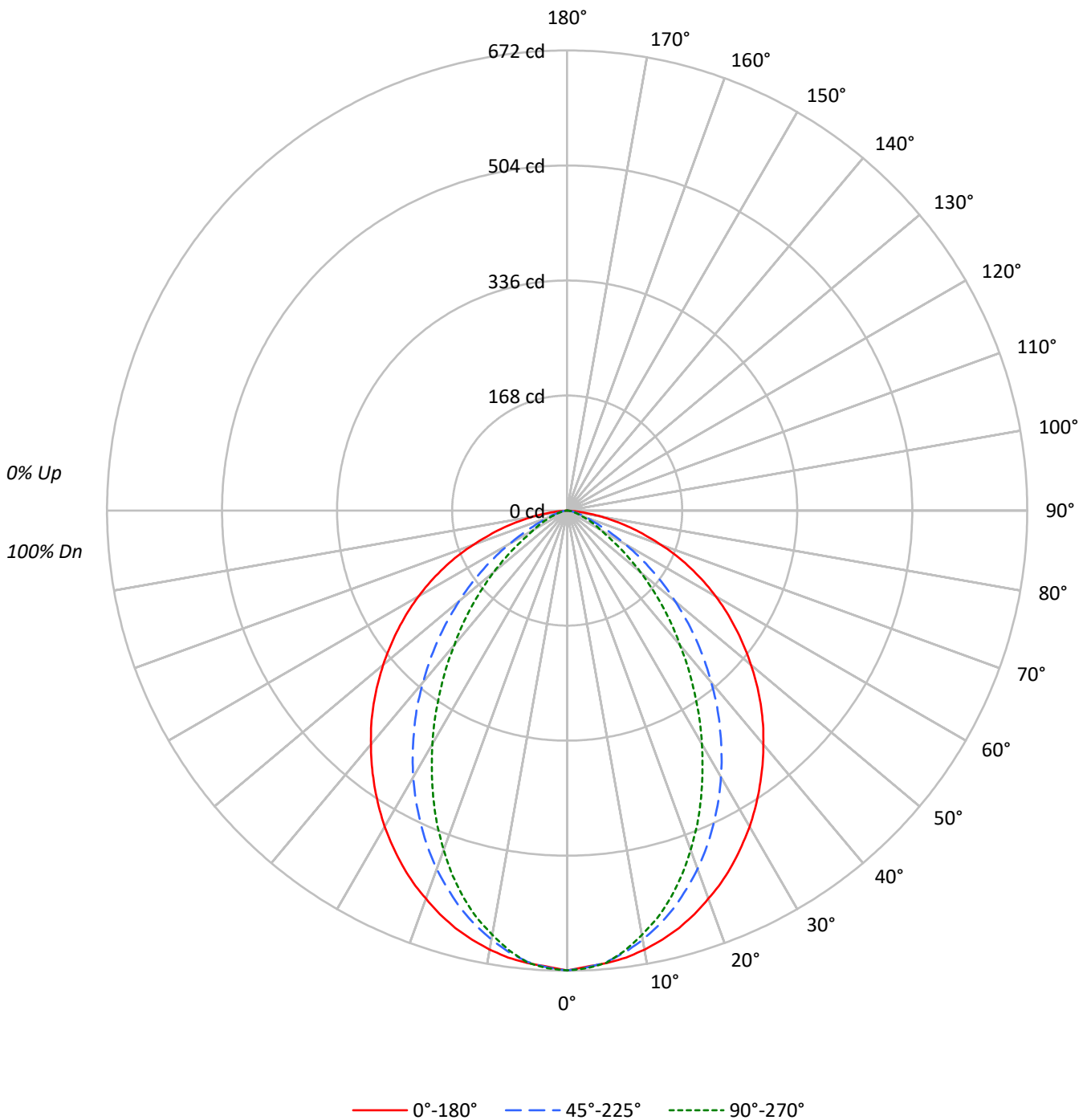
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1213.7 lumens  
Efficiency: N/A  
Efficacy: 63.5 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): 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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

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

	0°	45°	90°
0°	4747	4747	4747
5°	4708	4695	4703
10°	4673	4566	4517
15°	4619	4400	4282
20°	4537	4191	3967
25°	4452	3943	3608
30°	4350	3669	3213
35°	4234	3359	2795
40°	4114	3018	2364
45°	3997	2660	1959
50°	3857	2263	1539
55°	3709	1839	1119
60°	3543	1371	800
65°	3329	905	624
70°	3007	630	436
75°	2617	407	339
80°	2052	305	277
85°	1063	251	203

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3997 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.5	5.2
10°-20°	170.0	14.0
20°-30°	235.1	19.4
30°-40°	249.1	20.5
40°-50°	217.4	17.9
50°-60°	154.6	12.7
60°-70°	86.0	7.1
70°-80°	33.1	2.7
80°-90°	5.7	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°	467.7	38.5
0°-40°	716.8	59.1
0°-60°	1088.9	89.7
0°-90°	1213.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1213.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	672	672	672	672	672	
5°	663	668	662	660	663	63
15°	631	626	601	588	585	178
25°	571	552	506	474	463	263
35°	491	457	389	342	324	307
45°	400	352	266	213	196	308
55°	301	241	149	103	91	269
65°	199	131	54	40	37	197
75°	96	37	15	12	12	102
85°	13	4	3	2	2	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	671.5	671.5	671.5	671.5	671.5
2.5°	666.5	673.4	667.8	668.4	669.0
5°	663.4	668.4	661.6	659.7	662.8
7.5°	658.4	662.2	650.4	646.0	647.9
10°	651.0	652.2	636.1	629.8	629.2
12.5°	641.7	639.8	619.9	610.0	609.3
15°	631.1	625.5	601.2	588.2	585.1
17.5°	618.0	609.3	579.5	562.7	557.7
20°	603.1	591.3	557.1	535.3	527.3
22.5°	588.2	572.0	532.2	504.9	496.2
25°	570.8	551.5	505.5	474.4	462.6
27.5°	552.1	529.1	478.1	442.1	427.8
30°	532.9	506.1	449.5	409.1	393.6
32.5°	512.3	481.9	419.7	375.5	359.4
35°	490.6	457.0	389.2	342.0	323.9
37.5°	468.8	431.5	359.4	309.0	290.4
40°	445.8	405.4	327.0	275.4	256.2
42.5°	423.4	378.7	296.6	243.7	226.3
45°	399.8	351.9	266.1	212.6	195.9
47.5°	375.5	323.9	235.6	183.4	166.6
50°	350.7	296.6	205.8	154.8	139.9
52.5°	325.8	269.2	177.8	127.5	114.4
55°	300.9	241.2	149.2	103.2	90.8
57.5°	276.1	213.9	122.5	80.8	69.6
60°	250.6	185.9	97.0	59.7	56.6
62.5°	225.1	158.5	75.2	49.1	46.6
65°	199.0	130.6	54.1	39.8	37.3
67.5°	172.9	105.1	39.2	30.5	28.6
70°	145.5	80.2	30.5	23.0	21.1
72.5°	119.4	57.8	21.8	16.8	16.2
75°	95.8	37.3	14.9	12.4	12.4
77.5°	72.1	22.4	10.6	9.3	9.3
80°	50.4	13.1	7.5	6.8	6.8
82.5°	30.5	6.8	5.0	4.4	4.4
85°	13.1	3.7	3.1	2.5	2.5
87.5°	2.5	1.2	1.2	1.2	1.2
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	16.57	18.02	16.94	18.33	18.65	9.21	10.65	9.57	10.97	11.28
	3H	18.13	19.42	18.51	19.75	20.11	9.77	11.06	10.15	11.39	11.75
	4H	18.65	19.86	19.06	20.21	20.59	9.90	11.10	10.30	11.45	11.83
	6H	18.99	20.10	19.41	20.47	20.86	9.96	11.07	10.37	11.44	11.83
	8H	19.07	20.13	19.50	20.52	20.92	9.97	11.02	10.39	11.41	11.81
	12H	19.10	20.10	19.53	20.49	20.92	9.96	10.96	10.39	11.34	11.77
4H	2H	16.47	17.67	16.87	18.02	18.40	9.77	10.98	10.17	11.33	11.71
	3H	18.14	19.12	18.55	19.53	19.93	10.45	11.43	10.86	11.84	12.24
	4H	18.69	19.57	19.12	19.99	20.43	10.60	11.49	11.04	11.90	12.35
	6H	19.08	19.84	19.54	20.29	20.75	10.71	11.48	11.17	11.92	12.39
	8H	19.18	19.90	19.65	20.34	20.81	10.73	11.44	11.19	11.89	12.35
	12H	19.23	19.86	19.72	20.35	20.82	10.73	11.36	11.21	11.84	12.32
8H	4H	18.59	19.30	19.06	19.75	20.22	10.87	11.59	11.34	12.03	12.50
	6H	18.98	19.56	19.48	20.05	20.53	11.01	11.59	11.51	12.08	12.56
	8H	19.08	19.61	19.60	20.12	20.61	11.04	11.56	11.55	12.07	12.56
	12H	19.15	19.61	19.66	20.10	20.67	11.06	11.52	11.57	12.02	12.58
12H	4H	18.55	19.19	19.04	19.67	20.14	10.89	11.52	11.37	12.00	12.48
	6H	18.92	19.45	19.44	19.96	20.45	11.02	11.54	11.54	12.06	12.55
	8H	19.05	19.52	19.56	20.01	20.58	11.08	11.54	11.59	12.04	12.60