

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: P1061746

Luminaire Tested: S125RDRP-S610D940-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061746  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S610D940-X4F0-XX-UDD-WVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

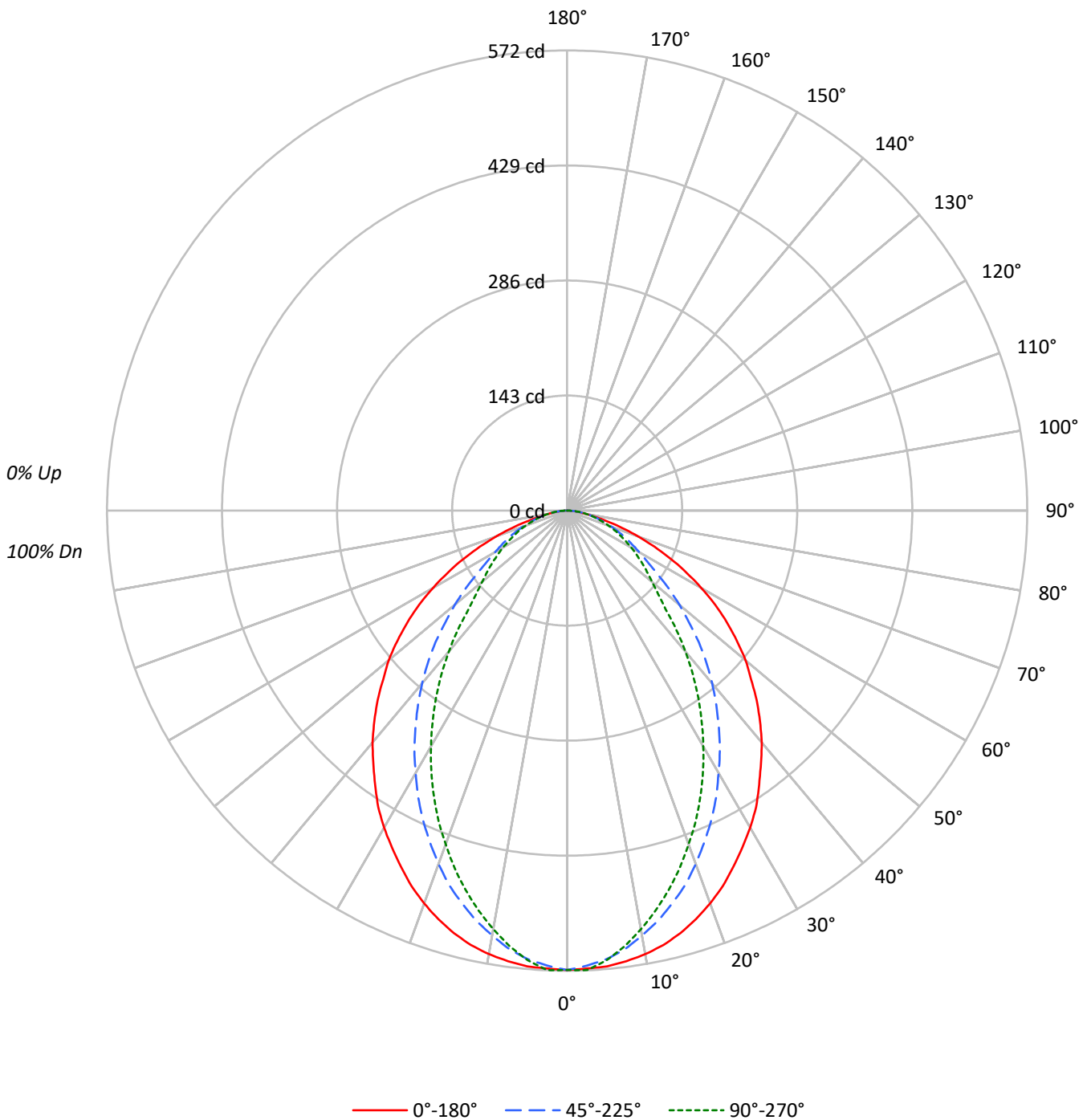
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1081.8 lumens  
Efficiency: N/A  
Efficacy: 55.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30

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

	0°	45°	90°
0°	3932	3932	3932
5°	3930	3870	3878
10°	3915	3750	3694
15°	3876	3602	3479
20°	3807	3425	3235
25°	3712	3222	2977
30°	3618	2993	2691
35°	3497	2762	2387
40°	3383	2519	2056
45°	3242	2252	1685
50°	3102	1953	1474
55°	2910	1630	1362
60°	2655	1425	1272
65°	2323	1303	1181
70°	1884	1174	1099
75°	1351	1072	1022
80°	936	960	960
85°	687	829	885

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3242 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.1	4.9
10°-20°	143.6	13.3
20°-30°	198.5	18.3
30°-40°	211.4	19.5
40°-50°	185.7	17.2
50°-60°	140.8	13.0
60°-70°	91.4	8.5
70°-80°	45.3	4.2
80°-90°	11.9	1.1
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°	395.2	36.5
0°-40°	606.6	56.1
0°-60°	933.2	86.3
0°-90°	1081.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1081.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	571	571	571	571	571	
5°	569	567	560	562	561	54
15°	544	531	505	494	488	153
25°	489	462	424	402	392	225
35°	416	378	329	299	284	260
45°	333	286	231	190	173	257
55°	242	195	136	117	114	216
65°	143	106	80	74	72	141
75°	51	45	40	39	38	57
85°	9	10	10	10	11	11
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	571.1	571.1	571.1	571.1	571.1
2.5°	569.8	571.1	566.1	570.4	571.7
5°	568.6	567.3	559.9	561.8	561.1
7.5°	564.9	562.4	550.0	548.7	546.3
10°	559.9	553.7	536.3	532.0	528.3
12.5°	553.1	543.2	522.1	513.4	509.1
15°	543.8	531.4	505.3	493.5	488.0
17.5°	532.6	515.3	488.0	471.8	465.6
20°	519.6	499.1	467.5	448.9	441.5
22.5°	505.3	481.1	445.8	426.0	417.9
25°	488.6	461.9	424.1	402.4	391.9
27.5°	471.8	442.1	401.2	377.0	365.8
30°	455.1	421.0	376.4	350.3	338.5
32.5°	437.1	399.3	353.4	324.9	311.3
35°	416.0	377.6	328.6	298.9	284.0
37.5°	395.6	354.7	304.4	271.0	256.7
40°	376.4	333.0	280.3	243.7	228.8
42.5°	354.7	310.0	256.1	217.6	200.9
45°	333.0	286.5	231.3	189.7	173.0
47.5°	310.0	264.1	205.2	164.3	153.1
50°	289.6	241.2	182.3	145.1	137.6
52.5°	266.0	218.9	158.7	130.2	125.2
55°	242.4	194.7	135.8	117.2	113.5
57.5°	218.3	173.0	117.8	106.0	102.3
60°	192.8	150.7	103.5	94.2	92.4
62.5°	167.4	127.7	91.1	84.3	81.8
65°	142.6	106.0	80.0	73.8	72.5
67.5°	117.2	86.2	68.8	64.5	63.9
70°	93.6	70.1	58.3	55.8	54.6
72.5°	71.9	55.8	49.0	47.1	46.5
75°	50.8	44.6	40.3	39.1	38.4
77.5°	34.1	34.1	32.2	31.0	31.6
80°	23.6	24.8	24.2	24.2	24.2
82.5°	15.5	16.7	17.4	17.4	17.4
85°	8.7	9.9	10.5	10.5	11.2
87.5°	3.1	3.7	4.3	5.0	5.0
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	15.31	16.80	15.68	17.12	17.43	11.55	13.04	11.92	13.36	13.67
	3H	16.62	17.96	17.00	18.29	18.65	13.13	14.47	13.51	14.80	15.16
	4H	16.99	18.24	17.39	18.59	18.97	13.74	14.99	14.14	15.34	15.72
	6H	17.17	18.32	17.58	18.69	19.08	14.21	15.36	14.62	15.73	16.12
	8H	17.20	18.30	17.63	18.69	19.10	14.37	15.47	14.80	15.86	16.26
	12H	17.22	18.27	17.65	18.65	19.08	14.48	15.53	14.91	15.92	16.35
4H	2H	15.42	16.68	15.82	17.02	17.40	12.21	13.46	12.61	13.81	14.19
	3H	16.91	17.95	17.32	18.35	18.75	13.99	15.03	14.41	15.43	15.83
	4H	17.38	18.32	17.82	18.73	19.17	14.71	15.65	15.15	16.06	16.50
	6H	17.67	18.48	18.13	18.92	19.38	15.30	16.11	15.76	16.56	17.02
	8H	17.74	18.50	18.20	18.94	19.41	15.51	16.27	15.97	16.71	17.18
	12H	17.78	18.46	18.26	18.93	19.41	15.66	16.34	16.15	16.82	17.29
8H	4H	17.47	18.22	17.93	18.67	19.14	15.02	15.78	15.49	16.23	16.69
	6H	17.83	18.46	18.33	18.95	19.43	15.73	16.36	16.23	16.85	17.33
	8H	17.95	18.51	18.46	19.02	19.51	16.01	16.57	16.53	17.08	17.57
	12H	18.03	18.53	18.54	19.02	19.59	16.24	16.74	16.75	17.23	17.79
12H	4H	17.46	18.14	17.94	18.62	19.09	15.05	15.73	15.53	16.20	16.68
	6H	17.83	18.40	18.35	18.91	19.39	15.78	16.34	16.30	16.85	17.34
	8H	17.99	18.49	18.50	18.98	19.55	16.12	16.61	16.63	17.11	17.67