

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: P1061698

Luminaire Tested: S125RDRP-S610D840-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061698
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S610D840-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

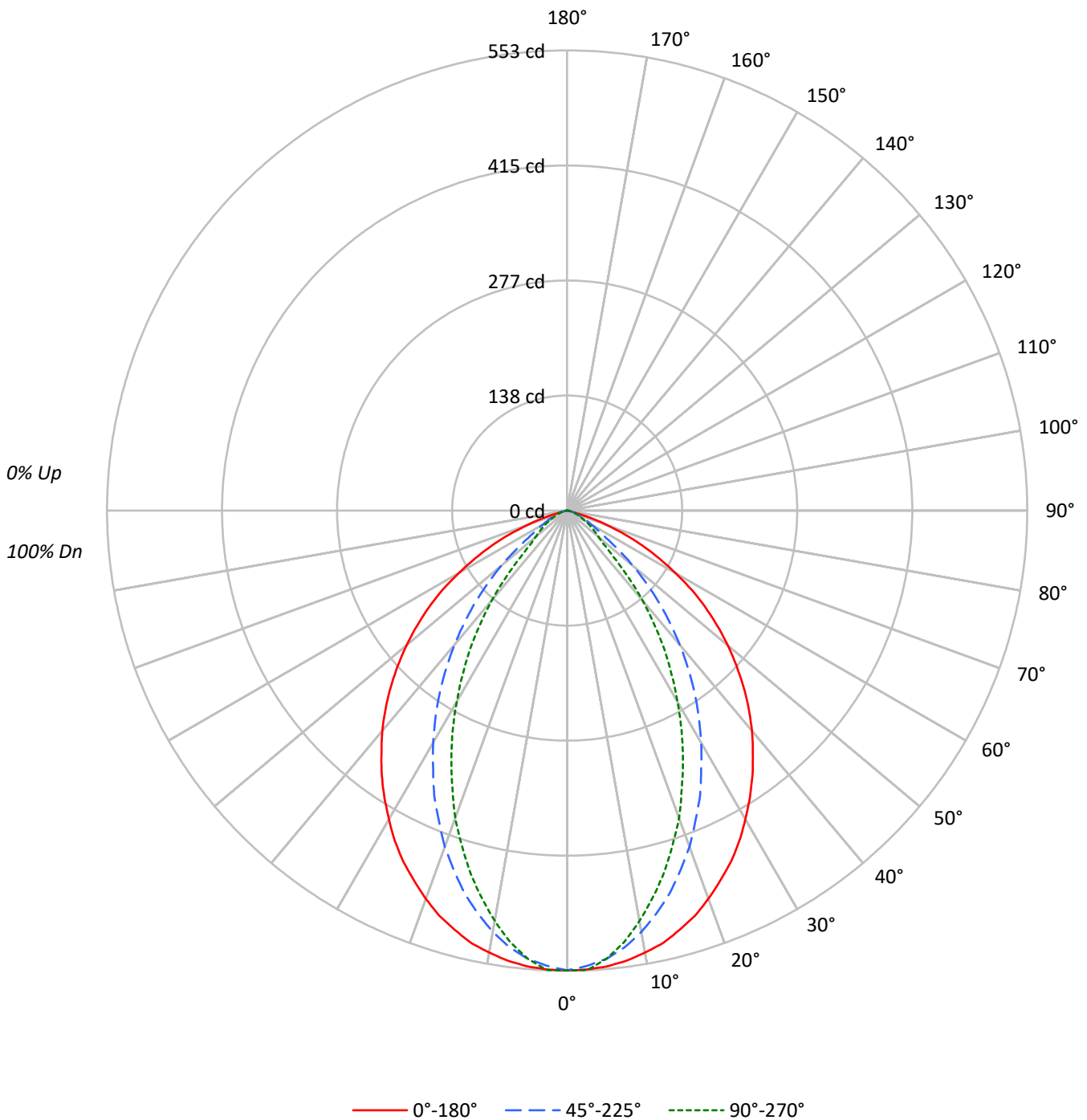
Lumens per Lamp: N/A
Luminaire Lumens: 799.2 lumens
Efficiency: N/A
Efficacy: 40.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (A_{in}): 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	0																			
RCR																																														
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																												
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90																												
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80																												
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71																												
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63																												
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57																												
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52																												
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47																												
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43																												
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39																												
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3805	3805	3805
5°	3800	3737	3737
10°	3770	3594	3501
15°	3719	3394	3208
20°	3638	3149	2881
25°	3537	2870	2502
30°	3406	2562	2110
35°	3264	2243	1711
40°	3105	1894	1268
45°	2919	1518	765
50°	2700	1113	527
55°	2436	683	438
60°	2070	464	348
65°	1636	355	275
70°	1033	254	225
75°	335	186	186
80°	111	139	167
85°	55	111	111

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2919 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.1	6.4
10°-20°	135.0	16.9
20°-30°	177.5	22.2
30°-40°	174.5	21.8
40°-50°	132.0	16.5
50°-60°	80.0	10.0
60°-70°	37.8	4.7
70°-80°	9.8	1.2
80°-90°	1.5	0.2
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°	363.6	45.5
0°-40°	538.1	67.3
0°-60°	750.1	93.9
0°-90°	799.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	799.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	553	553	553	553	553	
5°	550	548	541	541	541	52
15°	522	508	476	458	450	147
25°	466	430	378	343	329	214
35°	388	336	267	220	204	242
45°	300	236	156	99	79	231
55°	203	139	57	39	36	181
65°	100	51	22	18	17	99
75°	13	8	7	7	7	20
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	552.6	552.6	552.6	552.6	552.6
2.5°	551.9	551.9	547.7	552.6	552.6
5°	549.8	548.4	540.7	541.4	540.7
7.5°	545.6	542.8	529.5	526.0	523.2
10°	539.3	533.7	514.0	505.6	500.7
12.5°	532.3	522.4	495.8	483.8	476.1
15°	521.7	507.7	476.1	457.8	450.1
17.5°	510.5	490.1	452.9	431.2	421.3
20°	496.5	472.6	429.8	403.1	393.2
22.5°	481.0	452.9	403.1	373.6	360.2
25°	465.6	430.5	377.8	342.7	329.3
27.5°	448.0	408.0	349.0	312.5	297.7
30°	428.4	385.5	322.3	284.4	265.4
32.5°	408.7	362.3	294.2	252.8	233.8
35°	388.3	336.4	266.8	219.8	203.6
37.5°	366.6	311.8	238.8	189.6	170.6
40°	345.5	287.2	210.7	158.7	141.1
42.5°	323.0	262.6	182.6	128.5	108.8
45°	299.8	235.9	155.9	99.0	78.6
47.5°	276.0	212.1	129.2	73.0	59.0
50°	252.1	186.8	103.9	54.1	49.2
52.5°	227.5	162.2	78.6	44.9	42.8
55°	202.9	139.0	56.9	38.6	36.5
57.5°	177.7	113.8	42.8	33.0	30.9
60°	150.3	91.3	33.7	27.4	25.3
62.5°	125.0	71.6	27.4	22.5	21.1
65°	100.4	51.3	21.8	18.3	16.9
67.5°	75.1	34.4	16.9	14.0	14.0
70°	51.3	22.5	12.6	11.2	11.2
72.5°	30.9	13.3	9.1	9.1	9.1
75°	12.6	8.4	7.0	7.0	7.0
77.5°	4.2	4.9	4.9	5.6	5.6
80°	2.8	2.8	3.5	4.2	4.2
82.5°	1.4	2.1	2.1	2.8	2.8
85°	0.7	0.7	1.4	1.4	1.4
87.5°	0.0	0.0	0.0	0.7	0.7
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	13.97	15.31	14.34	15.62	15.93	4.63	5.96	4.99	6.27	6.59
	3H	14.68	15.86	15.06	16.19	16.55	5.40	6.58	5.78	6.91	7.28
	4H	14.70	15.79	15.10	16.14	16.53	5.65	6.75	6.05	7.10	7.48
	6H	14.63	15.63	15.04	16.00	16.40	5.83	6.83	6.24	7.20	7.60
	8H	14.59	15.54	15.02	15.93	16.33	5.87	6.82	6.30	7.22	7.62
	12H	14.54	15.45	14.98	15.84	16.27	5.88	6.79	6.31	7.17	7.60
4H	2H	13.81	14.90	14.21	15.25	15.64	5.12	6.21	5.52	6.56	6.95
	3H	14.55	15.44	14.96	15.85	16.25	6.02	6.91	6.43	7.31	7.72
	4H	14.57	15.36	15.00	15.78	16.23	6.33	7.12	6.76	7.54	7.99
	6H	14.51	15.19	14.97	15.64	16.10	6.59	7.27	7.05	7.72	8.18
	8H	14.46	15.09	14.93	15.54	16.01	6.65	7.29	7.12	7.74	8.21
	12H	14.41	14.97	14.90	15.46	15.93	6.68	7.24	7.16	7.72	8.20
8H	4H	14.45	15.09	14.92	15.54	16.01	6.44	7.08	6.91	7.53	8.00
	6H	14.38	14.90	14.88	15.39	15.87	6.76	7.28	7.26	7.77	8.25
	8H	14.32	14.79	14.84	15.30	15.80	6.86	7.33	7.38	7.84	8.34
	12H	14.28	14.69	14.80	15.19	15.76	6.92	7.34	7.44	7.83	8.40
12H	4H	14.41	14.97	14.89	15.45	15.93	6.41	6.97	6.90	7.46	7.93
	6H	14.32	14.78	14.84	15.30	15.79	6.73	7.19	7.25	7.71	8.20
	8H	14.28	14.69	14.80	15.19	15.76	6.87	7.28	7.38	7.77	8.34