

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: P1061697

Luminaire Tested: S125RDRP-S610D840-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061697
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S610D840-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

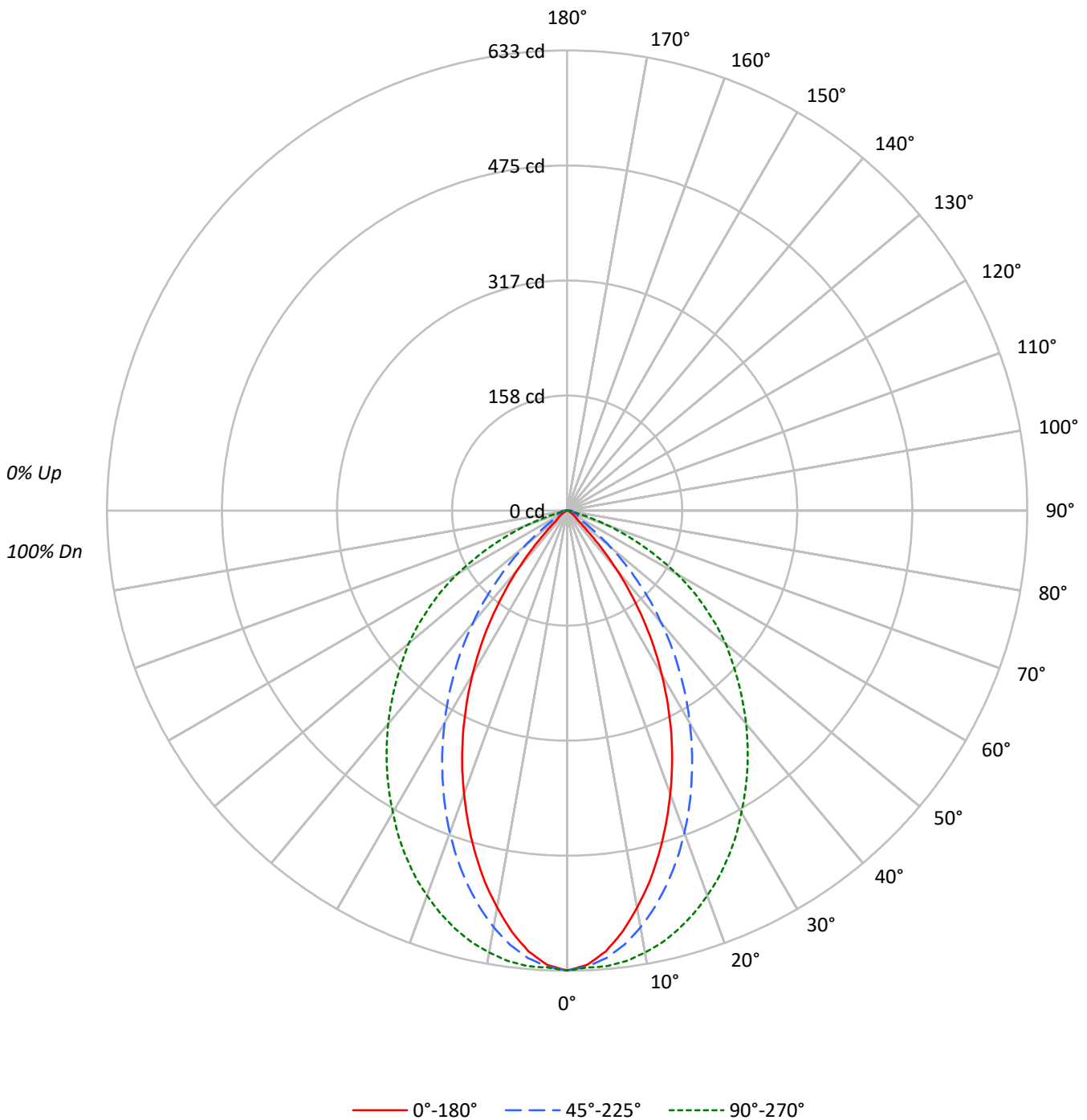
Lumens per Lamp: N/A
Luminaire Lumens: 818.4 lumens
Efficiency: N/A
Efficacy: 41.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (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	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	98	98	96	95	95	93	92	90
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4356	4356	4356
5°	4207	4271	4348
10°	3877	4069	4315
15°	3482	3788	4244
20°	3039	3456	4130
25°	2574	3081	3989
30°	2068	2682	3811
35°	1531	2263	3634
40°	947	1807	3443
45°	370	1321	3238
50°	174	828	3050
55°	126	354	2768
60°	87	252	2400
65°	57	264	1867
70°	56	240	1174
75°	74	242	375
80°	111	278	250
85°	166	553	387

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3238 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.0	7.1
10°-20°	150.3	18.4
20°-30°	191.5	23.4
30°-40°	178.2	21.8
40°-50°	122.7	15.0
50°-60°	69.4	8.5
60°-70°	32.8	4.0
70°-80°	10.2	1.3
80°-90°	5.3	0.7
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°	399.8	48.8
0°-40°	578.0	70.6
0°-60°	770.1	94.1
0°-90°	818.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	818.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	633	633	633	633	633	
5°	609	617	618	624	629	56
15°	488	505	531	572	595	136
25°	339	361	406	474	525	154
35°	182	207	269	361	432	113
45°	38	60	136	245	332	36
55°	10	12	30	141	231	10
65°	4	4	16	51	115	4
75°	3	6	9	10	14	3
85°	2	6	7	6	5	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	632.6	632.6	632.6	632.6	632.6
2.5°	625.6	631.9	627.7	628.4	629.1
5°	608.7	617.2	617.9	623.5	629.1
7.5°	584.1	594.7	602.4	615.8	624.9
10°	554.6	567.3	582.0	603.8	617.2
12.5°	523.0	537.7	558.1	589.0	608.0
15°	488.5	504.7	531.4	571.5	595.4
17.5°	452.0	470.2	502.6	550.4	580.6
20°	414.7	434.4	471.7	526.5	563.7
22.5°	377.5	397.8	439.3	500.5	545.5
25°	338.8	360.6	405.6	473.8	525.1
27.5°	299.4	321.9	371.8	446.4	503.3
30°	260.1	284.0	337.4	418.2	479.4
32.5°	221.4	245.3	303.7	390.1	456.2
35°	182.1	207.4	269.2	361.3	432.3
37.5°	142.7	170.1	235.5	331.8	407.7
40°	105.4	131.4	201.0	303.0	383.1
42.5°	70.3	95.6	170.1	274.1	357.8
45°	38.0	60.5	135.7	245.3	332.5
47.5°	20.4	32.3	106.1	217.2	307.9
50°	16.2	18.3	77.3	191.2	284.7
52.5°	13.4	14.8	50.6	166.6	258.0
55°	10.5	11.9	29.5	141.3	230.6
57.5°	8.4	9.8	19.0	117.4	203.8
60°	6.3	7.7	18.3	94.2	174.3
62.5°	4.9	5.6	16.9	72.4	143.4
65°	3.5	4.2	16.2	50.6	114.6
67.5°	2.8	3.5	14.8	32.3	85.8
70°	2.8	2.8	11.9	21.1	58.3
72.5°	2.8	4.9	10.5	14.1	35.1
75°	2.8	6.3	9.1	9.8	14.1
77.5°	2.8	7.0	7.7	7.7	7.7
80°	2.8	6.3	7.0	7.0	6.3
82.5°	2.8	5.6	6.3	7.0	5.6
85°	2.1	5.6	7.0	6.3	4.9
87.5°	2.1	5.6	6.3	5.6	3.5
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	0.00	0.00	0.00	0.00	0.00	14.36	15.65	14.72	15.96	16.28
	3H	0.00	0.00	0.00	0.00	0.00	15.08	16.22	15.46	16.55	16.92
	4H	0.00	0.00	0.00	0.00	0.00	15.10	16.16	15.50	16.51	16.90
	6H	0.00	0.00	0.00	0.01	0.40	15.05	16.03	15.47	16.40	16.79
	8H	0.00	0.23	0.00	0.62	1.03	15.03	15.95	15.46	16.34	16.75
	12H	0.00	0.78	0.33	1.16	1.59	15.01	15.89	15.44	16.28	16.71
4H	2H	0.00	0.00	0.00	0.28	0.66	14.15	15.21	14.55	15.56	15.95
	3H	0.00	0.54	0.08	0.94	1.35	14.91	15.77	15.32	16.18	16.58
	4H	0.67	1.45	1.11	1.87	2.31	14.93	15.71	15.37	16.13	16.57
	6H	1.95	2.61	2.41	3.06	3.53	14.91	15.58	15.38	16.03	16.49
	8H	2.53	3.15	3.00	3.60	4.07	14.90	15.52	15.37	15.97	16.44
	12H	3.09	3.64	3.58	4.12	4.60	14.90	15.45	15.39	15.94	16.41
8H	4H	2.09	2.71	2.56	3.16	3.63	14.82	15.44	15.29	15.89	16.36
	6H	3.64	4.15	4.15	4.65	5.13	14.81	15.31	15.31	15.81	16.29
	8H	4.44	4.89	4.96	5.41	5.90	14.82	15.27	15.34	15.79	16.28
	12H	5.27	5.68	5.79	6.17	6.74	14.88	15.28	15.39	15.78	16.35
12H	4H	2.31	2.86	2.79	3.34	3.81	14.77	15.32	15.26	15.81	16.28
	6H	4.01	4.47	4.54	4.99	5.48	14.76	15.22	15.28	15.73	16.22
	8H	5.00	5.40	5.52	5.90	6.47	14.81	15.21	15.32	15.70	16.28