

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: P1061695

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061695
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)
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-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

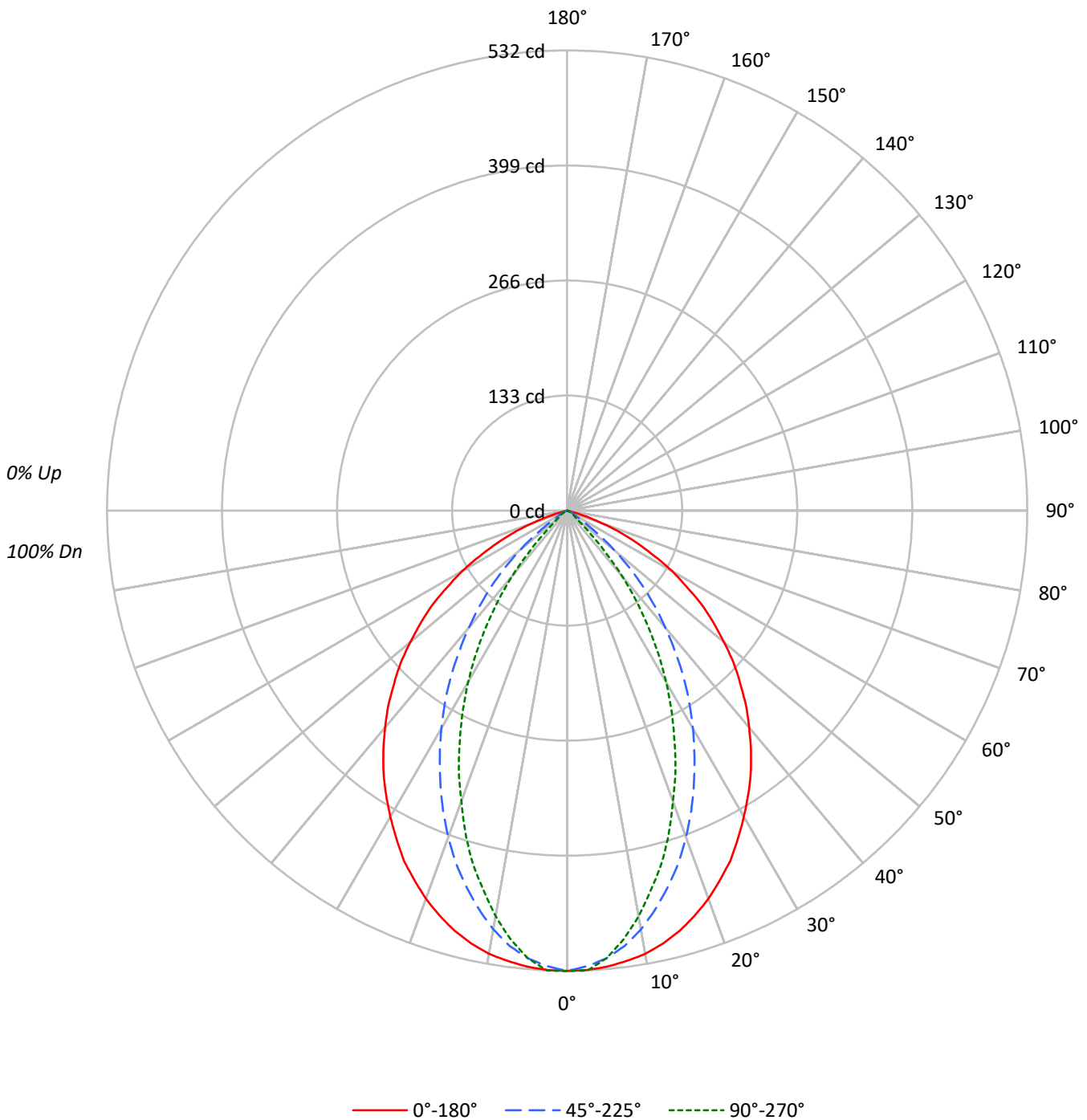
Lumens per Lamp: N/A
Luminaire Lumens: 687.6 lumens
Efficiency: N/A
Efficacy: 35.1 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3664	3664	3664
5°	3659	3591	3591
10°	3638	3436	3329
15°	3584	3208	3008
20°	3499	2943	2619
25°	3393	2635	2230
30°	3249	2311	1820
35°	3110	1971	1363
40°	2941	1590	884
45°	2756	1204	383
50°	2534	767	142
55°	2284	337	101
60°	1933	145	67
65°	1465	91	34
70°	890	42	14
75°	186	19	19
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2756 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.1	7.1
10°-20°	127.9	18.6
20°-30°	164.2	23.9
30°-40°	154.6	22.5
40°-50°	108.1	15.7
50°-60°	57.7	8.4
60°-70°	23.0	3.3
70°-80°	3.0	0.4
80°-90°	0.0	0.0
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°	341.2	49.6
0°-40°	495.8	72.1
0°-60°	661.6	96.2
0°-90°	687.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	687.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	532	532	532	532	532	
5°	529	528	520	521	520	50
15°	503	487	450	429	422	141
25°	447	407	347	309	294	205
35°	370	311	234	181	162	231
45°	283	212	124	60	39	218
55°	190	117	28	10	8	169
65°	90	36	6	3	2	89
75°	7	2	1	1	1	14
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	532.2	532.2	532.2	532.2	532.2
2.5°	531.5	532.2	527.3	531.5	532.2
5°	529.4	528.0	519.6	521.0	519.6
7.5°	525.2	521.7	507.7	502.8	499.9
10°	520.3	512.6	491.5	481.0	476.1
12.5°	512.6	501.3	471.9	455.7	448.7
15°	502.8	486.6	450.1	429.0	422.0
17.5°	490.8	469.8	427.6	401.6	391.1
20°	477.5	449.4	401.6	370.7	357.4
22.5°	462.0	429.7	375.0	340.6	327.2
25°	446.6	407.3	346.9	309.0	293.5
27.5°	427.6	384.1	318.8	278.1	261.2
30°	408.7	360.9	290.7	246.5	228.9
32.5°	389.7	336.3	262.6	213.5	195.9
35°	370.0	311.1	234.5	181.2	162.2
37.5°	349.0	285.8	204.3	150.3	130.6
40°	327.2	261.2	176.9	120.1	98.3
42.5°	306.1	236.6	149.6	90.6	66.7
45°	283.0	212.1	123.6	59.7	39.3
47.5°	261.2	188.2	96.9	34.4	20.4
50°	236.6	163.6	71.6	18.3	13.3
52.5°	213.5	139.7	47.7	11.9	10.5
55°	190.3	116.6	28.1	9.8	8.4
57.5°	163.6	94.1	15.4	7.7	6.3
60°	140.4	73.7	10.5	5.6	4.9
62.5°	113.8	54.1	7.7	4.2	3.5
65°	89.9	35.8	5.6	2.8	2.1
67.5°	66.7	21.1	3.5	1.4	1.4
70°	44.2	11.2	2.1	0.7	0.7
72.5°	23.2	4.9	1.4	0.7	0.7
75°	7.0	2.1	0.7	0.7	0.7
77.5°	0.0	0.7	0.0	0.0	0.7
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	13.46	14.72	13.82	15.03	15.35	0.00	0.00	0.00	0.00	0.00
	3H	14.04	15.15	14.42	15.48	15.85	0.00	0.00	0.00	0.00	0.00
	4H	14.00	15.04	14.41	15.39	15.77	0.00	0.00	0.00	0.00	0.00
	6H	13.92	14.86	14.33	15.24	15.63	0.00	0.00	0.00	0.00	0.00
	8H	13.87	14.77	14.30	15.16	15.56	0.00	0.00	0.00	0.00	0.00
	12H	13.83	14.68	14.26	15.06	15.49	0.00	0.00	0.00	0.00	0.00
4H	2H	13.23	14.26	13.63	14.61	15.00	0.00	0.00	0.00	0.00	0.00
	3H	13.82	14.66	14.23	15.06	15.47	0.00	0.00	0.00	0.00	0.00
	4H	13.77	14.51	14.21	14.93	15.38	0.00	0.00	0.00	0.00	0.00
	6H	13.68	14.32	14.15	14.77	15.24	0.00	0.00	0.00	0.00	0.00
	8H	13.62	14.22	14.09	14.67	15.14	0.00	0.00	0.00	0.00	0.00
	12H	13.57	14.09	14.06	14.58	15.05	0.00	0.00	0.00	0.00	0.00
8H	4H	13.62	14.22	14.09	14.67	15.14	0.00	0.00	0.00	0.00	0.00
	6H	13.52	14.00	14.02	14.50	14.98	0.00	0.00	0.00	0.00	0.00
	8H	13.45	13.88	13.98	14.40	14.89	0.00	0.00	0.00	0.00	0.00
	12H	13.40	13.78	13.92	14.28	14.85	0.00	0.00	0.00	0.00	0.00
12H	4H	13.57	14.09	14.06	14.58	15.05	0.00	0.00	0.00	0.00	0.00
	6H	13.45	13.88	13.97	14.40	14.89	0.00	0.00	0.00	0.00	0.00
	8H	13.40	13.78	13.92	14.28	14.85	0.00	0.00	0.00	0.00	0.00