

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: P1060534

Luminaire Tested: S124RDRP-S575D950-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060534
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S575D950-X4F0-XX-UDD-BVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

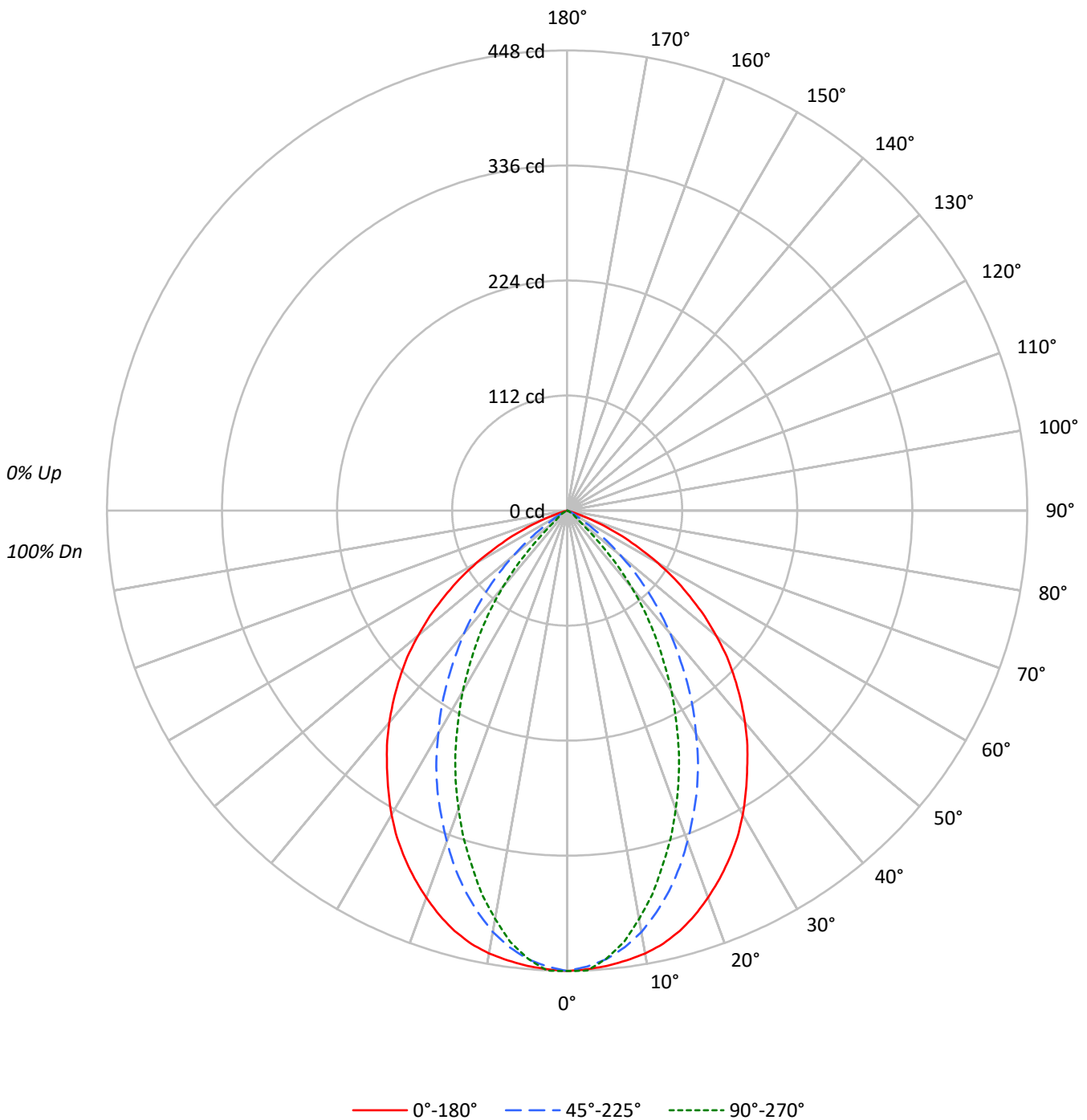
Lumens per Lamp: N/A
Luminaire Lumens: 585.2 lumens
Efficiency: N/A
Efficacy: 29.9 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	96	94	93	91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3860	3860	3860
5°	3847	3790	3784
10°	3828	3642	3528
15°	3776	3418	3193
20°	3674	3140	2832
25°	3551	2843	2443
30°	3401	2493	2022
35°	3214	2138	1573
40°	3028	1755	1099
45°	2808	1349	544
50°	2533	911	182
55°	2187	467	126
60°	1752	167	90
65°	1200	92	39
70°	539	48	33
75°	0	20	20
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2808 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.4	7.1
10°-20°	108.5	18.5
20°-30°	140.5	24.0
30°-40°	133.4	22.8
40°-50°	94.5	16.1
50°-60°	48.5	8.3
60°-70°	17.0	2.9
70°-80°	1.5	0.2
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°	290.3	49.6
0°-40°	423.8	72.4
0°-60°	566.8	96.9
0°-90°	585.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	585.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	448	448	448	448	448	
5°	445	446	438	438	438	42
15°	424	411	383	365	358	119
25°	374	345	299	268	257	172
35°	306	261	203	164	150	191
45°	231	178	111	64	45	177
55°	146	96	31	9	8	130
65°	59	28	4	3	2	59
75°	0	1	1	1	1	5
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	448.2	448.2	448.2	448.2	448.2
2.5°	446.9	448.2	444.3	447.6	448.2
5°	445.0	445.6	438.5	438.5	437.8
7.5°	441.7	440.4	428.8	424.2	423.6
10°	437.8	433.3	416.5	406.8	403.5
12.5°	432.0	423.6	400.9	386.7	382.8
15°	423.6	410.6	383.4	365.3	358.2
17.5°	413.2	396.4	364.0	342.0	334.9
20°	400.9	379.6	342.6	318.0	309.0
22.5°	388.0	363.4	320.6	292.8	283.7
25°	373.7	344.6	299.2	267.5	257.1
27.5°	358.8	324.5	275.9	242.9	229.3
30°	342.0	304.4	250.7	216.3	203.4
32.5°	323.8	282.4	228.0	191.1	175.5
35°	305.7	261.0	203.4	163.9	149.6
37.5°	288.2	240.9	178.8	137.3	123.7
40°	269.4	218.9	156.1	113.3	97.8
42.5°	250.0	197.5	132.8	88.7	71.9
45°	230.6	177.5	110.8	63.5	44.7
47.5°	211.1	156.1	89.4	40.2	24.0
50°	189.1	135.4	68.0	21.4	13.6
52.5°	168.4	115.9	48.6	12.3	10.4
55°	145.7	95.9	31.1	9.1	8.4
57.5°	124.4	76.4	17.5	7.1	6.5
60°	101.7	58.9	9.7	5.8	5.2
62.5°	79.0	42.7	6.5	3.9	3.2
65°	58.9	28.5	4.5	2.6	1.9
67.5°	38.9	16.2	3.2	1.3	1.3
70°	21.4	7.8	1.9	1.3	1.3
72.5°	7.8	2.6	1.3	0.6	0.6
75°	0.0	0.6	0.6	0.6	0.6
77.5°	0.0	0.0	0.0	0.0	0.6
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	13.22	14.48	13.58	14.79	15.10	0.00	0.00	0.00	0.00	0.00
	3H	13.50	14.60	13.88	14.93	15.30	0.00	0.00	0.00	0.00	0.00
	4H	13.42	14.45	13.83	14.80	15.18	0.00	0.00	0.00	0.00	0.00
	6H	13.34	14.27	13.75	14.65	15.04	0.00	0.00	0.00	0.00	0.00
	8H	13.29	14.18	13.72	14.57	14.97	0.00	0.00	0.00	0.00	0.00
	12H	13.24	14.09	13.68	14.47	14.90	0.00	0.00	0.00	0.00	0.00
4H	2H	12.99	14.02	13.40	14.37	14.75	0.00	0.00	0.00	0.00	0.00
	3H	13.28	14.11	13.69	14.51	14.91	0.00	0.00	0.00	0.00	0.00
	4H	13.18	13.92	13.62	14.34	14.79	0.00	0.00	0.00	0.00	0.00
	6H	13.10	13.73	13.56	14.18	14.64	0.00	0.00	0.00	0.00	0.00
	8H	13.04	13.62	13.51	14.07	14.54	0.00	0.00	0.00	0.00	0.00
	12H	12.98	13.50	13.47	13.99	14.46	0.00	0.00	0.00	0.00	0.00
8H	4H	13.04	13.62	13.51	14.07	14.55	0.00	0.00	0.00	0.00	0.00
	6H	12.93	13.40	13.43	13.90	14.39	0.00	0.00	0.00	0.00	0.00
	8H	12.86	13.29	13.39	13.81	14.30	0.00	0.00	0.00	0.00	0.00
	12H	12.81	13.19	13.33	13.68	14.26	0.00	0.00	0.00	0.00	0.00
12H	4H	12.98	13.50	13.47	13.99	14.46	0.00	0.00	0.00	0.00	0.00
	6H	12.86	13.29	13.39	13.81	14.30	0.00	0.00	0.00	0.00	0.00
	8H	12.81	13.19	13.33	13.68	14.26	0.00	0.00	0.00	0.00	0.00