

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: P1060499

Luminaire Tested: S124RDRP-S575D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060499
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S575D927-X4F0-XX-UDD-BVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

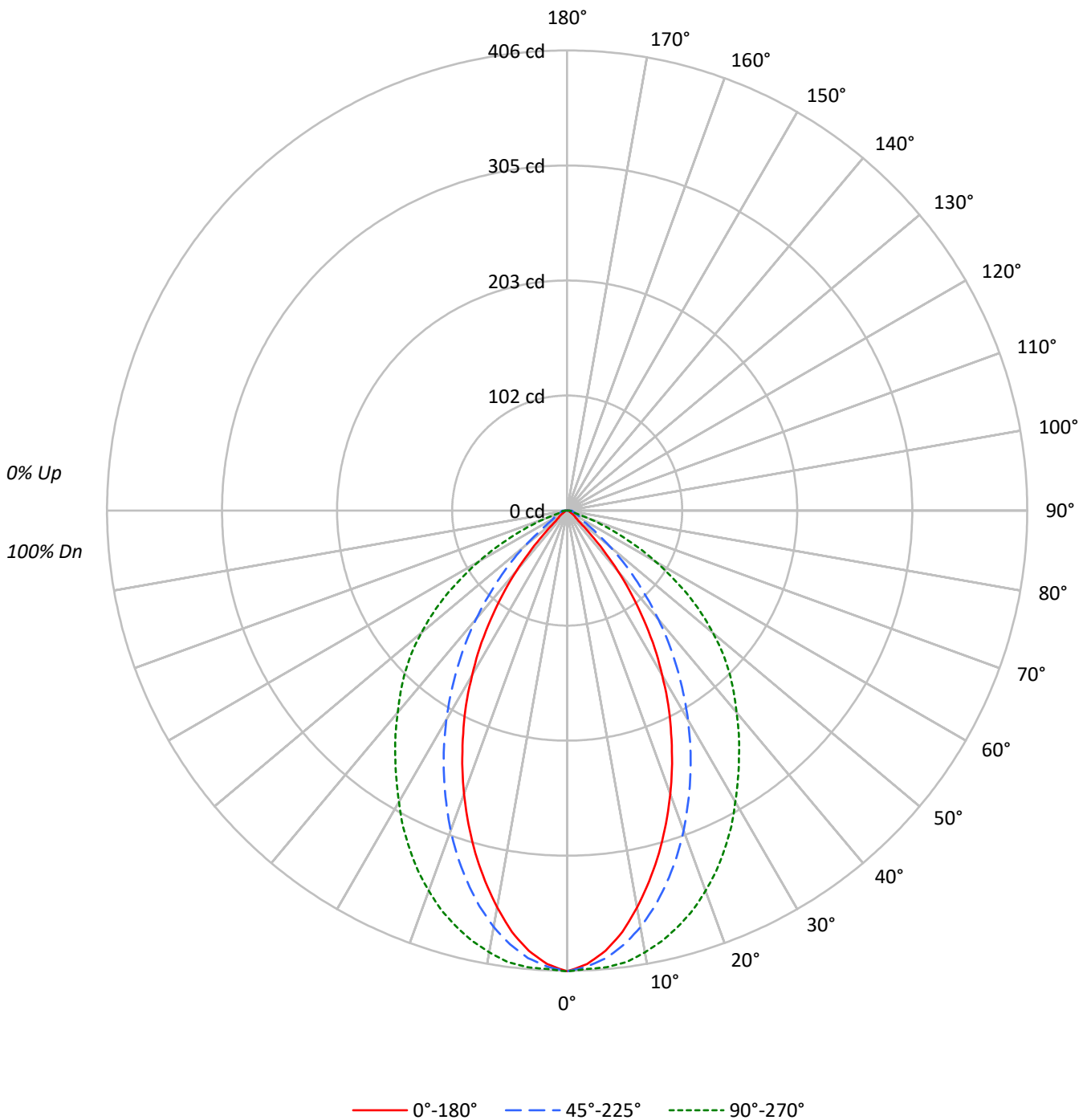
Lumens per Lamp: N/A
Luminaire Lumens: 510.2 lumens
Efficiency: N/A
Efficacy: 26.0 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3500	3500	3500
5°	3369	3426	3496
10°	3108	3262	3460
15°	2789	3028	3384
20°	2438	2753	3271
25°	2062	2446	3126
30°	1665	2120	2950
35°	1239	1771	2779
40°	787	1404	2615
45°	314	1029	2465
50°	137	656	2251
55°	105	339	1964
60°	74	233	1559
65°	55	230	1064
70°	55	204	488
75°	73	216	196
80°	109	238	213
85°	217	425	316

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2465 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.2	7.3
10°-20°	96.0	18.8
20°-30°	121.2	23.8
30°-40°	111.4	21.8
40°-50°	75.9	14.9
50°-60°	41.2	8.1
60°-70°	17.5	3.4
70°-80°	6.0	1.2
80°-90°	3.8	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°	254.4	49.9
0°-40°	365.8	71.7
0°-60°	482.9	94.6
0°-90°	510.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	510.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	406	406	406	406	406	
5°	390	396	396	400	404	36
15°	313	323	340	364	380	87
25°	217	231	257	297	329	99
35°	118	134	168	221	264	73
45°	26	42	84	150	202	24
55°	7	8	23	82	131	6
65°	3	3	11	26	52	3
75°	2	6	6	6	6	2
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	406.5	406.5	406.5	406.5	406.5
2.5°	400.6	405.4	402.7	403.8	404.9
5°	389.8	395.7	396.3	399.5	404.4
7.5°	374.7	381.7	386.0	394.1	401.7
10°	355.4	364.0	373.1	386.0	395.7
12.5°	334.9	344.1	357.5	375.8	388.7
15°	312.8	323.1	339.7	364.0	379.6
17.5°	289.7	301.0	320.9	349.4	369.4
20°	266.0	278.4	300.4	332.7	357.0
22.5°	241.8	254.7	278.9	315.5	344.1
25°	217.0	231.0	257.4	297.2	329.0
27.5°	193.3	206.2	235.3	278.9	313.9
30°	167.4	182.0	213.2	260.1	296.7
32.5°	143.8	157.8	190.6	240.7	280.5
35°	117.9	133.5	168.5	221.3	264.4
37.5°	93.7	108.8	147.0	203.0	248.8
40°	70.0	85.6	124.9	184.7	232.6
42.5°	46.8	63.5	103.9	165.8	217.5
45°	25.8	41.5	84.5	149.7	202.4
47.5°	13.5	22.6	66.2	133.5	186.3
50°	10.2	12.4	49.0	115.8	168.0
52.5°	8.6	9.2	33.4	98.0	149.7
55°	7.0	7.5	22.6	82.4	130.8
57.5°	5.4	5.9	16.2	67.3	109.8
60°	4.3	4.8	13.5	51.7	90.5
62.5°	3.2	3.8	12.9	38.2	71.1
65°	2.7	3.2	11.3	25.8	52.2
67.5°	2.2	3.2	9.7	16.7	35.0
70°	2.2	4.3	8.1	10.8	19.4
72.5°	2.2	4.8	7.0	7.0	7.0
75°	2.2	5.9	6.5	5.9	5.9
77.5°	2.2	5.4	5.4	5.4	5.4
80°	2.2	4.8	4.8	4.8	4.3
82.5°	2.2	4.3	4.8	4.8	3.8
85°	2.2	4.3	4.3	4.3	3.2
87.5°	1.6	4.3	4.3	4.3	2.2
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	12.79	14.07	13.16	14.38	14.70
	3H	0.00	0.00	0.00	0.00	0.00	13.15	14.28	13.53	14.61	14.97
	4H	0.00	0.00	0.00	0.00	0.00	13.12	14.17	13.52	14.52	14.90
	6H	0.00	0.06	0.00	0.43	0.82	13.09	14.05	13.51	14.43	14.82
	8H	0.00	0.70	0.22	1.09	1.49	13.08	13.99	13.51	14.38	14.79
	12H	0.60	1.47	1.04	1.86	2.29	13.08	13.95	13.51	14.33	14.76
4H	2H	0.00	0.00	0.00	0.00	0.27	12.60	13.65	13.00	14.00	14.38
	3H	0.00	0.76	0.32	1.17	1.57	12.99	13.85	13.41	14.25	14.66
	4H	1.36	2.12	1.80	2.54	2.99	12.97	13.74	13.41	14.16	14.60
	6H	2.62	3.27	3.08	3.72	4.19	12.99	13.65	13.46	14.10	14.56
	8H	3.19	3.81	3.66	4.25	4.73	13.00	13.62	13.47	14.06	14.53
	12H	3.88	4.42	4.37	4.91	5.38	13.04	13.58	13.52	14.06	14.54
8H	4H	2.44	3.06	2.91	3.50	3.97	12.87	13.49	13.34	13.94	14.41
	6H	4.05	4.55	4.55	5.05	5.53	12.92	13.42	13.43	13.92	14.40
	8H	4.88	5.34	5.41	5.85	6.35	12.98	13.43	13.50	13.95	14.44
	12H	5.86	6.26	6.38	6.76	7.33	13.09	13.49	13.61	13.99	14.56
12H	4H	2.63	3.17	3.11	3.65	4.13	12.83	13.38	13.32	13.86	14.34
	6H	4.39	4.84	4.91	5.36	5.85	12.89	13.34	13.41	13.86	14.35
	8H	5.41	5.81	5.93	6.31	6.88	12.99	13.39	13.51	13.89	14.46