

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: P1060508

Luminaire Tested: S124RDRP-S575D930-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060508
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-S575D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

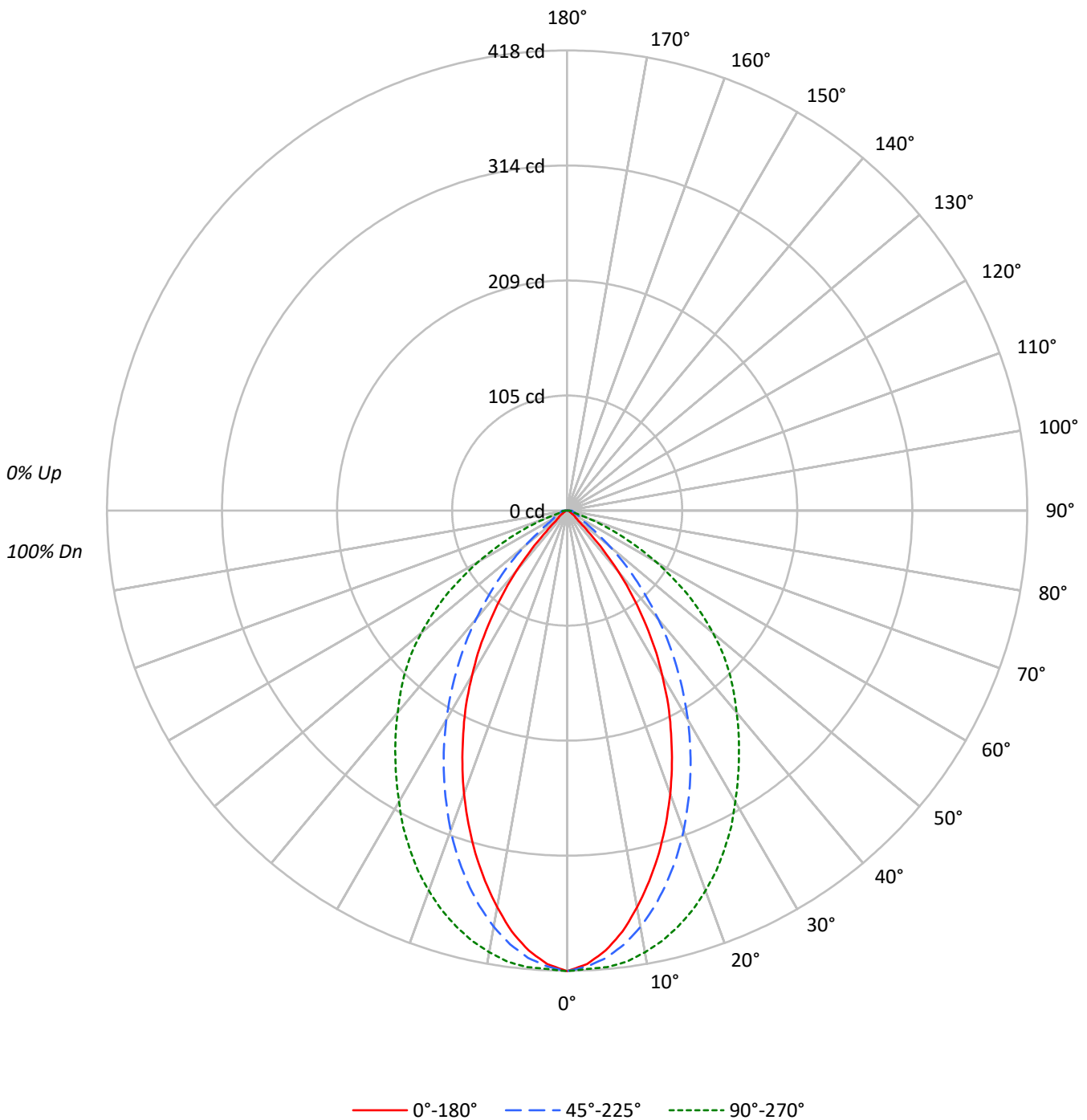
Lumens per Lamp: N/A
Luminaire Lumens: 525.0 lumens
Efficiency: N/A
Efficacy: 26.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (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	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	88	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	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°	3603	3603	3603
5°	3468	3525	3598
10°	3198	3358	3561
15°	2871	3118	3483
20°	2508	2833	3367
25°	2122	2517	3217
30°	1713	2182	3036
35°	1276	1823	2860
40°	809	1446	2691
45°	324	1059	2538
50°	141	675	2316
55°	108	350	2022
60°	76	239	1603
65°	57	236	1096
70°	55	209	501
75°	73	220	203
80°	109	248	218
85°	217	435	326

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2538 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.3	7.3
10°-20°	98.8	18.8
20°-30°	124.8	23.8
30°-40°	114.6	21.8
40°-50°	78.1	14.9
50°-60°	42.4	8.1
60°-70°	18.0	3.4
70°-80°	6.2	1.2
80°-90°	3.9	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°	261.8	49.9
0°-40°	376.4	71.7
0°-60°	496.9	94.6
0°-90°	525.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	525.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	418	418	418	418	418	
5°	401	407	408	411	416	37
15°	322	332	350	375	391	90
25°	223	238	265	306	339	102
35°	121	137	173	228	272	75
45°	27	43	87	154	208	24
55°	7	8	23	85	135	6
65°	3	3	12	27	54	3
75°	2	6	7	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°	418.4	418.4	418.4	418.4	418.4
2.5°	412.3	417.3	414.5	415.6	416.7
5°	401.2	407.3	407.8	411.2	416.2
7.5°	385.7	392.9	397.3	405.6	413.4
10°	365.7	374.6	384.0	397.3	407.3
12.5°	344.7	354.1	367.9	386.8	400.1
15°	322.0	332.5	349.7	374.6	390.7
17.5°	298.1	309.8	330.3	359.6	380.1
20°	273.7	286.5	309.2	342.5	367.4
22.5°	248.8	262.1	287.0	324.7	354.1
25°	223.3	237.7	264.9	305.9	338.6
27.5°	198.9	212.2	242.2	287.0	323.1
30°	172.3	187.3	219.4	267.6	305.3
32.5°	148.0	162.4	196.2	247.7	288.7
35°	121.4	137.4	173.4	227.7	272.1
37.5°	96.4	111.9	151.3	208.9	256.0
40°	72.0	88.1	128.6	190.1	239.4
42.5°	48.2	65.4	106.9	170.7	223.9
45°	26.6	42.7	87.0	154.0	208.4
47.5°	13.9	23.3	68.2	137.4	191.7
50°	10.5	12.7	50.4	119.1	172.9
52.5°	8.9	9.4	34.4	100.9	154.0
55°	7.2	7.8	23.3	84.8	134.7
57.5°	5.5	6.1	16.6	69.3	113.0
60°	4.4	5.0	13.9	53.2	93.1
62.5°	3.3	3.9	13.3	39.3	73.1
65°	2.8	3.3	11.6	26.6	53.8
67.5°	2.2	3.3	10.0	17.2	36.0
70°	2.2	4.4	8.3	11.1	19.9
72.5°	2.2	5.0	7.2	7.2	7.2
75°	2.2	6.1	6.6	6.1	6.1
77.5°	2.2	5.5	5.5	5.5	5.5
80°	2.2	5.0	5.0	5.0	4.4
82.5°	2.2	4.4	5.0	5.0	3.9
85°	2.2	4.4	4.4	4.4	3.3
87.5°	1.7	4.4	4.4	4.4	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	12.90	14.17	13.26	14.49	14.80
	3H	0.00	0.00	0.00	0.00	0.00	13.25	14.38	13.63	14.71	15.08
	4H	0.00	0.00	0.00	0.00	0.00	13.22	14.27	13.62	14.62	15.00
	6H	0.00	0.10	0.00	0.47	0.86	13.19	14.16	13.61	14.53	14.92
	8H	0.00	0.72	0.24	1.11	1.52	13.18	14.09	13.61	14.48	14.89
	12H	0.61	1.48	1.04	1.86	2.29	13.18	14.05	13.61	14.43	14.86
4H	2H	0.00	0.00	0.00	0.00	0.36	12.70	13.75	13.10	14.10	14.48
	3H	0.00	0.85	0.41	1.26	1.66	13.09	13.95	13.51	14.35	14.76
	4H	1.45	2.22	1.89	2.64	3.08	13.07	13.84	13.51	14.26	14.70
	6H	2.69	3.35	3.16	3.80	4.27	13.09	13.75	13.56	14.20	14.66
	8H	3.26	3.87	3.73	4.32	4.79	13.10	13.72	13.57	14.16	14.64
	12H	3.93	4.47	4.41	4.95	5.43	13.14	13.68	13.62	14.16	14.64
8H	4H	2.52	3.14	2.99	3.58	4.06	12.97	13.59	13.44	14.04	14.51
	6H	4.13	4.64	4.64	5.13	5.62	13.02	13.53	13.53	14.02	14.50
	8H	4.96	5.41	5.49	5.93	6.42	13.08	13.53	13.60	14.05	14.54
	12H	5.92	6.32	6.44	6.82	7.39	13.20	13.60	13.71	14.09	14.66
12H	4H	2.71	3.25	3.20	3.74	4.21	12.94	13.48	13.42	13.96	14.44
	6H	4.48	4.94	5.01	5.45	5.94	12.99	13.44	13.51	13.96	14.45
	8H	5.50	5.90	6.01	6.39	6.97	13.10	13.50	13.61	13.99	14.56