

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1060537

Luminaire Tested: S124RDR-S575D950-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060537
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S575D950-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

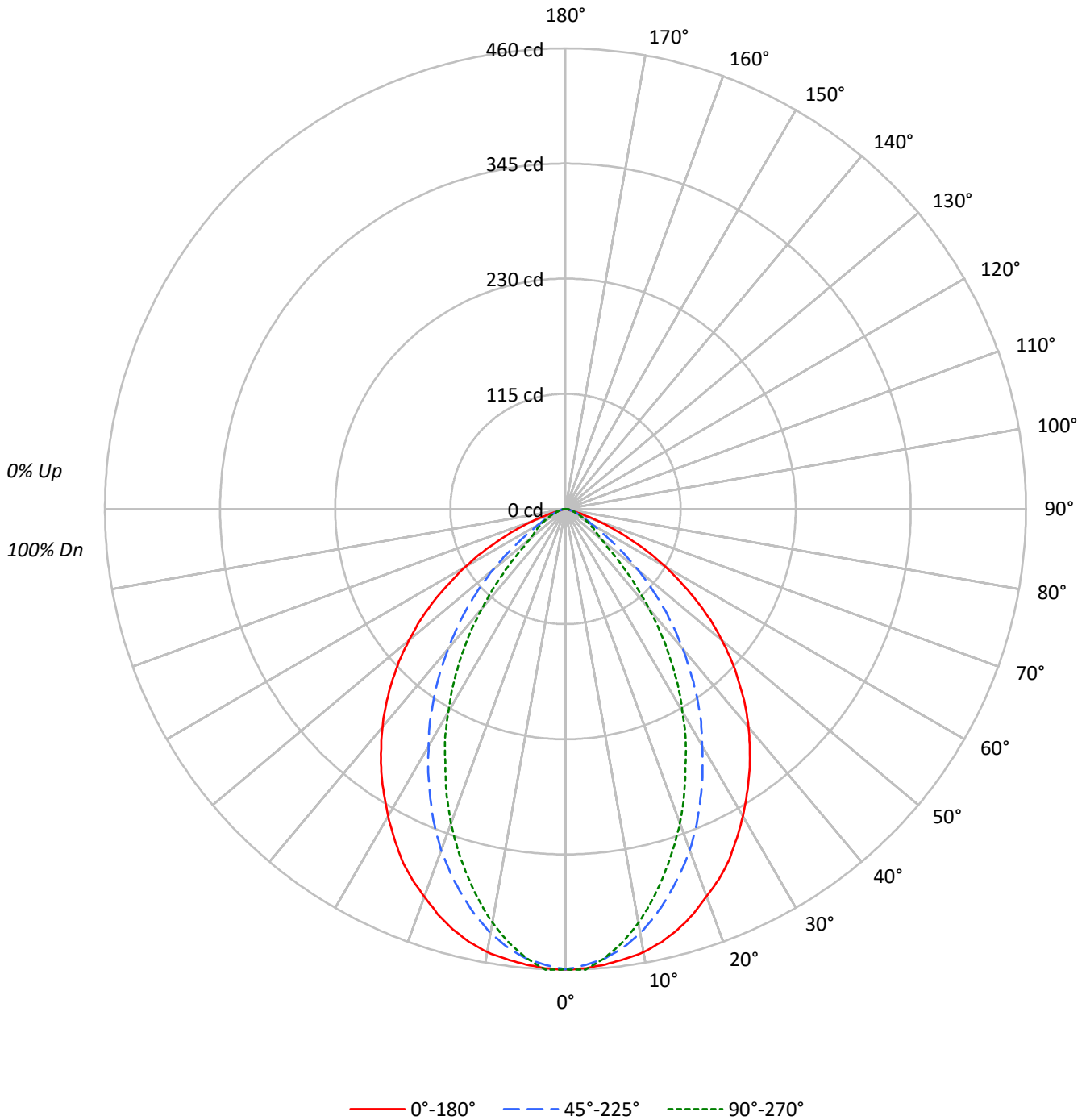
Lumens per Lamp: N/A
Luminaire Lumens: 678.0 lumens
Efficiency: N/A
Efficacy: 34.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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	97	98	96	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	60	71	65	60	69	64	59	67	62	59	57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3960	3960	3960
5°	3947	3897	3891
10°	3930	3761	3670
15°	3874	3557	3378
20°	3775	3324	3063
25°	3674	3034	2696
30°	3523	2717	2325
35°	3370	2403	1920
40°	3196	2046	1456
45°	2990	1672	978
50°	2733	1267	607
55°	2402	836	515
60°	1986	513	424
65°	1439	395	342
70°	783	295	262
75°	173	216	236
80°	129	159	193
85°	128	128	188

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2990 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.6	6.3
10°-20°	113.2	16.7
20°-30°	149.9	22.1
30°-40°	148.8	21.9
40°-50°	114.5	16.9
50°-60°	68.2	10.1
60°-70°	31.0	4.6
70°-80°	8.0	1.2
80°-90°	1.8	0.3
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°	305.7	45.1
0°-40°	454.4	67.0
0°-60°	637.2	94.0
0°-90°	678.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	678.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	460	460	460	460	460	
5°	457	457	451	451	450	43
15°	435	424	399	385	379	122
25°	387	359	319	293	284	177
35°	321	280	229	194	183	200
45°	246	198	137	96	80	189
55°	160	114	56	35	34	143
65°	71	42	19	17	17	71
75°	5	6	6	7	7	11
85°	1	1	1	2	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	459.9	459.9	459.9	459.9	459.9
2.5°	459.2	459.9	456.0	459.2	460.5
5°	456.6	457.3	450.8	450.8	450.1
7.5°	453.4	452.1	441.7	437.8	436.5
10°	449.5	445.0	430.1	422.3	419.7
12.5°	443.0	435.9	415.8	404.8	400.3
15°	434.6	423.6	399.0	385.4	378.9
17.5°	424.2	410.6	381.5	364.0	356.9
20°	411.9	393.8	362.7	340.7	334.2
22.5°	400.3	377.6	342.0	316.7	309.6
25°	386.7	358.8	319.3	292.8	283.7
27.5°	370.5	340.7	296.6	269.4	260.4
30°	354.3	321.3	273.3	244.8	233.8
32.5°	337.4	301.2	252.0	219.6	209.2
35°	320.6	280.4	228.6	193.7	182.6
37.5°	302.5	259.7	205.3	169.0	156.7
40°	284.3	239.6	182.0	145.1	129.5
42.5°	265.6	218.9	159.3	120.5	104.9
45°	245.5	197.5	137.3	95.9	80.3
47.5°	225.4	177.5	115.3	71.9	57.6
50°	204.0	156.1	94.6	52.5	45.3
52.5°	182.6	135.4	73.8	40.8	38.9
55°	160.0	114.0	55.7	35.0	34.3
57.5°	136.7	94.6	40.2	30.4	29.1
60°	115.3	76.4	29.8	25.9	24.6
62.5°	93.3	57.6	24.6	21.4	20.1
65°	70.6	42.1	19.4	16.8	16.8
67.5°	51.2	28.5	15.5	13.6	13.0
70°	31.1	17.5	11.7	11.0	10.4
72.5°	15.5	10.4	9.1	8.4	8.4
75°	5.2	6.5	6.5	7.1	7.1
77.5°	3.9	4.5	4.5	5.2	5.2
80°	2.6	3.2	3.2	3.9	3.9
82.5°	1.9	1.9	2.6	2.6	3.2
85°	1.3	1.3	1.3	1.9	1.9
87.5°	0.6	0.6	0.6	1.3	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)