

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: P1060456

Luminaire Tested: S124RDR-S350D950-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060456
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-S350D950-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

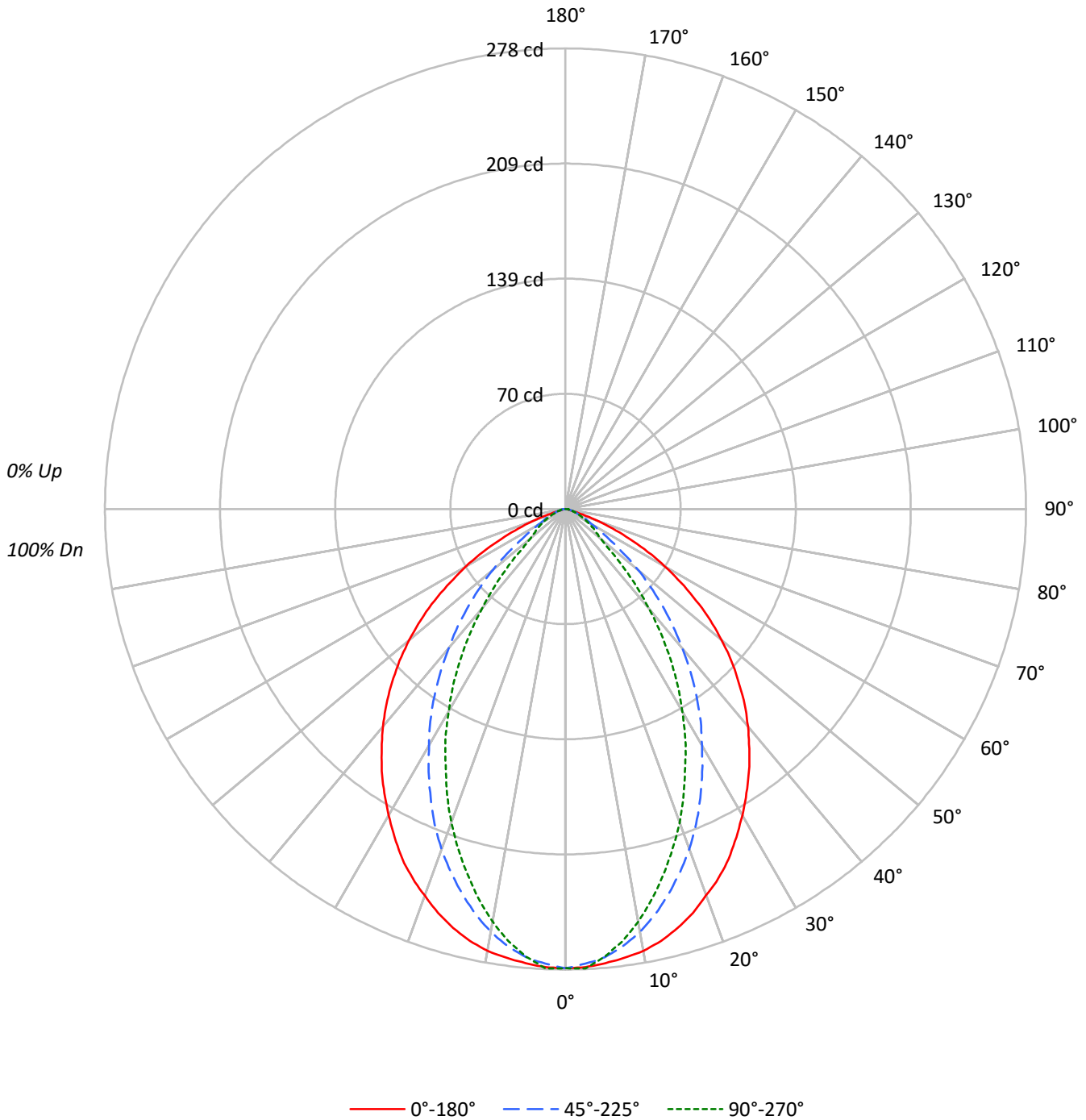
Lumens per Lamp: N/A
Luminaire Lumens: 408.7 lumens
Efficiency: N/A
Efficacy: 32.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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

TEST NUMBER: P1060456

CATALOG NUMBER: S124RDR-S350D950-X4F0-XX-UDD-SVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1060456

CATALOG NUMBER: S124RDR-S350D950-X4F0-XX-UDD-SVL-B

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	63	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°	2387	2387	2387
5°	2379	2349	2345
10°	2369	2266	2212
15°	2335	2144	2036
20°	2275	2003	1846
25°	2215	1829	1625
30°	2123	1638	1401
35°	2031	1449	1157
40°	1927	1233	878
45°	1802	1008	589
50°	1648	764	366
55°	1447	504	311
60°	1197	310	255
65°	868	238	206
70°	471	176	156
75°	103	130	143
80°	79	99	114
85°	79	79	119

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1802 cd/sqm



TEST NUMBER: P1060456

CATALOG NUMBER: S124RDR-S350D950-X4F0-XX-UDD-SVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.7	6.3
10°-20°	68.2	16.7
20°-30°	90.4	22.1
30°-40°	89.7	21.9
40°-50°	69.0	16.9
50°-60°	41.1	10.1
60°-70°	18.7	4.6
70°-80°	4.8	1.2
80°-90°	1.1	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°	184.2	45.1
0°-40°	273.9	67.0
0°-60°	384.0	94.0
0°-90°	408.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	408.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	277	277	277	277	277	
5°	275	276	272	272	271	26
15°	262	255	240	232	228	74
25°	233	216	192	176	171	107
35°	193	169	138	117	110	121
45°	148	119	83	58	48	114
55°	96	69	34	21	21	86
65°	43	25	12	10	10	43
75°	3	4	4	4	4	7
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



TEST NUMBER: P1060456

CATALOG NUMBER: S124RDR-S350D950-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	277.2	277.2	277.2	277.2	277.2
2.5°	276.8	277.2	274.8	276.8	277.6
5°	275.2	275.6	271.7	271.7	271.3
7.5°	273.3	272.5	266.2	263.9	263.1
10°	270.9	268.2	259.2	254.5	253.0
12.5°	267.0	262.7	250.6	244.0	241.3
15°	261.9	255.3	240.5	232.3	228.4
17.5°	255.7	247.5	229.9	219.4	215.1
20°	248.3	237.4	218.6	205.3	201.4
22.5°	241.3	227.6	206.1	190.9	186.6
25°	233.1	216.3	192.5	176.5	171.0
27.5°	223.3	205.3	178.8	162.4	156.9
30°	213.5	193.6	164.7	147.6	140.9
32.5°	203.4	181.5	151.9	132.3	126.1
35°	193.2	169.0	137.8	116.7	110.1
37.5°	182.3	156.5	123.8	101.9	94.5
40°	171.4	144.4	109.7	87.4	78.1
42.5°	160.1	131.9	96.0	72.6	63.2
45°	148.0	119.1	82.8	57.8	48.4
47.5°	135.9	107.0	69.5	43.3	34.7
50°	123.0	94.1	57.0	31.6	27.3
52.5°	110.1	81.6	44.5	24.6	23.4
55°	96.4	68.7	33.6	21.1	20.7
57.5°	82.4	57.0	24.2	18.3	17.6
60°	69.5	46.1	18.0	15.6	14.8
62.5°	56.2	34.7	14.8	12.9	12.1
65°	42.6	25.4	11.7	10.1	10.1
67.5°	30.8	17.2	9.4	8.2	7.8
70°	18.7	10.5	7.0	6.6	6.2
72.5°	9.4	6.2	5.5	5.1	5.1
75°	3.1	3.9	3.9	4.3	4.3
77.5°	2.3	2.7	2.7	3.1	3.1
80°	1.6	2.0	2.0	2.3	2.3
82.5°	1.2	1.2	1.6	1.6	2.0
85°	0.8	0.8	0.8	1.2	1.2
87.5°	0.4	0.4	0.4	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)