

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: P1060458

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060458
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-74)
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-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

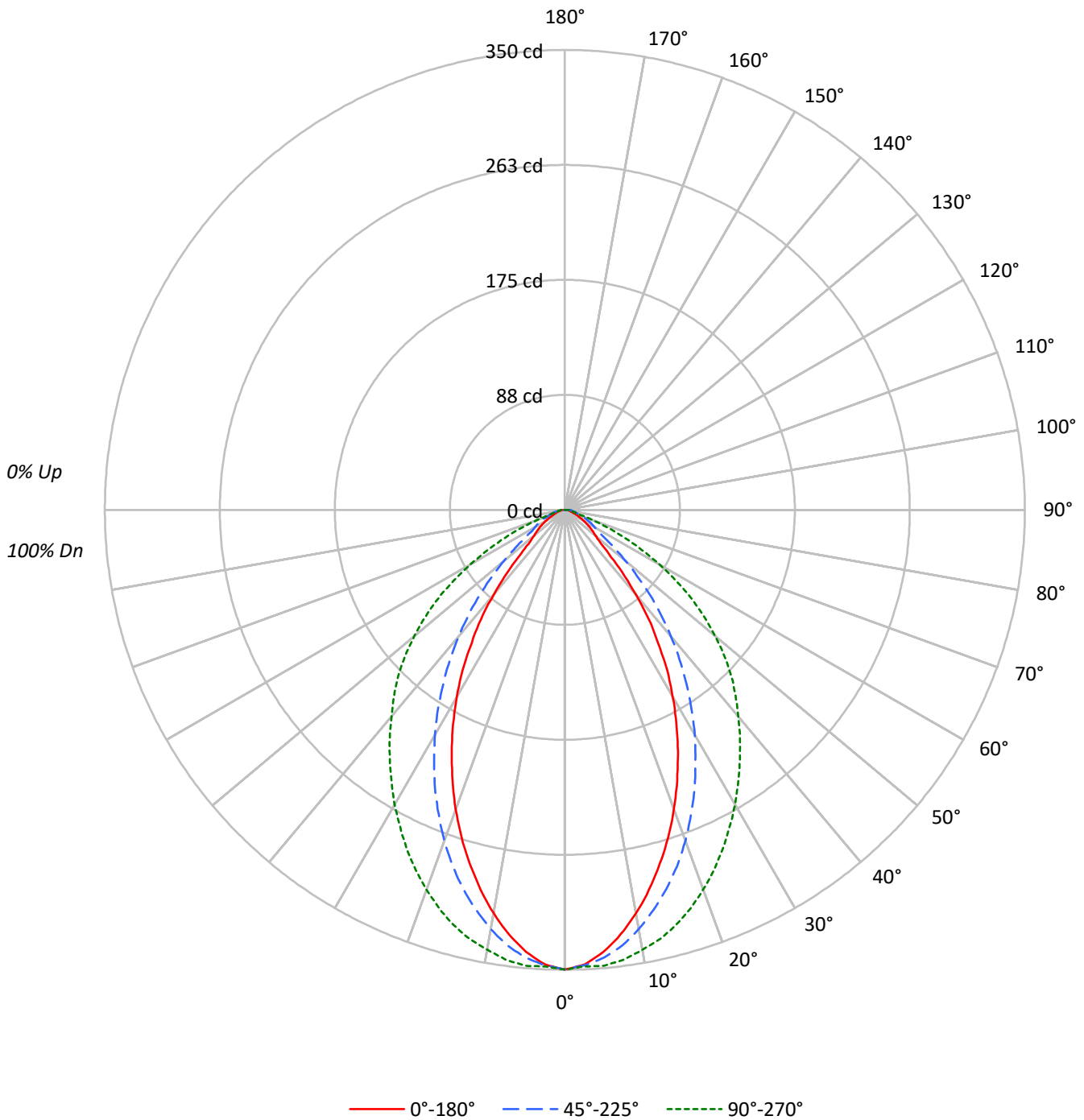
Lumens per Lamp: N/A
Luminaire Lumens: 495.1 lumens
Efficiency: N/A
Efficacy: 39.6 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

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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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79				79
3	97	88	82	76	94	87	81	76	84	79	75	81	77	73	79	75	72	70				70
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63				63
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57				57
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51				51
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47				47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43				43
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3012	3012	3012
5°	2919	2956	3010
10°	2727	2833	2973
15°	2487	2662	2916
20°	2224	2457	2819
25°	1934	2220	2703
30°	1632	1966	2576
35°	1298	1692	2440
40°	944	1410	2307
45°	571	1113	2185
50°	409	806	2000
55°	347	545	1766
60°	282	444	1428
65°	222	397	1027
70°	186	335	541
75°	170	313	273
80°	174	312	273
85°	227	464	306

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2185 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.2	6.5
10°-20°	84.4	17.0
20°-30°	109.4	22.1
30°-40°	105.3	21.3
40°-50°	78.4	15.8
50°-60°	48.2	9.7
60°-70°	23.7	4.8
70°-80°	9.2	1.9
80°-90°	4.2	0.9
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°	226.0	45.7
0°-40°	331.4	66.9
0°-60°	457.9	92.5
0°-90°	495.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	495.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	350	350	350	350	350	
5°	338	343	342	345	348	31
15°	279	288	299	317	327	78
25°	204	215	234	263	284	93
35°	124	135	161	201	232	77
45°	47	58	91	141	179	39
55°	23	24	36	83	118	21
65°	11	12	20	31	50	11
75°	5	9	9	9	8	6
85°	2	4	5	5	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	349.8	349.8	349.8	349.8	349.8
2.5°	346.3	350.2	347.0	347.4	347.8
5°	337.7	342.7	342.0	345.1	348.2
7.5°	325.9	331.8	334.5	340.8	345.1
10°	311.9	318.5	324.0	334.1	340.0
12.5°	296.2	304.0	311.9	325.5	334.5
15°	279.0	288.0	298.6	316.6	327.1
17.5°	261.4	270.4	284.1	304.8	318.1
20°	242.7	252.5	268.1	291.2	307.6
22.5°	223.2	233.7	250.9	277.1	296.6
25°	203.6	214.6	233.7	263.0	284.5
27.5°	184.1	194.6	215.3	248.2	271.6
30°	164.1	175.1	197.7	232.1	259.1
32.5°	145.0	155.2	179.4	216.9	245.4
35°	123.5	135.2	161.0	201.3	232.1
37.5°	105.1	115.7	143.4	185.6	218.9
40°	84.0	95.7	125.4	170.4	205.2
42.5°	64.5	76.2	108.3	155.2	192.3
45°	46.9	58.2	91.4	141.1	179.4
47.5°	35.6	42.2	75.0	127.4	164.9
50°	30.5	32.4	60.2	112.6	149.3
52.5°	27.0	27.7	46.9	97.7	133.7
55°	23.1	23.8	36.3	82.9	117.6
57.5°	19.5	19.9	29.3	68.8	100.4
60°	16.4	16.8	25.8	55.1	82.9
62.5°	13.7	14.1	23.1	42.6	66.0
65°	10.9	11.7	19.5	31.3	50.4
67.5°	9.0	10.6	16.4	21.9	35.2
70°	7.4	10.2	13.3	15.2	21.5
72.5°	6.3	9.4	11.3	10.9	10.6
75°	5.1	9.0	9.4	8.6	8.2
77.5°	4.3	7.8	7.8	7.0	6.6
80°	3.5	6.3	6.3	6.3	5.5
82.5°	3.1	5.1	5.5	5.5	4.3
85°	2.3	4.3	4.7	4.7	3.1
87.5°	1.6	3.9	4.3	3.9	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)