

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: P1060453

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060453
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S350D950-X4F0-XX-UDD-BVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

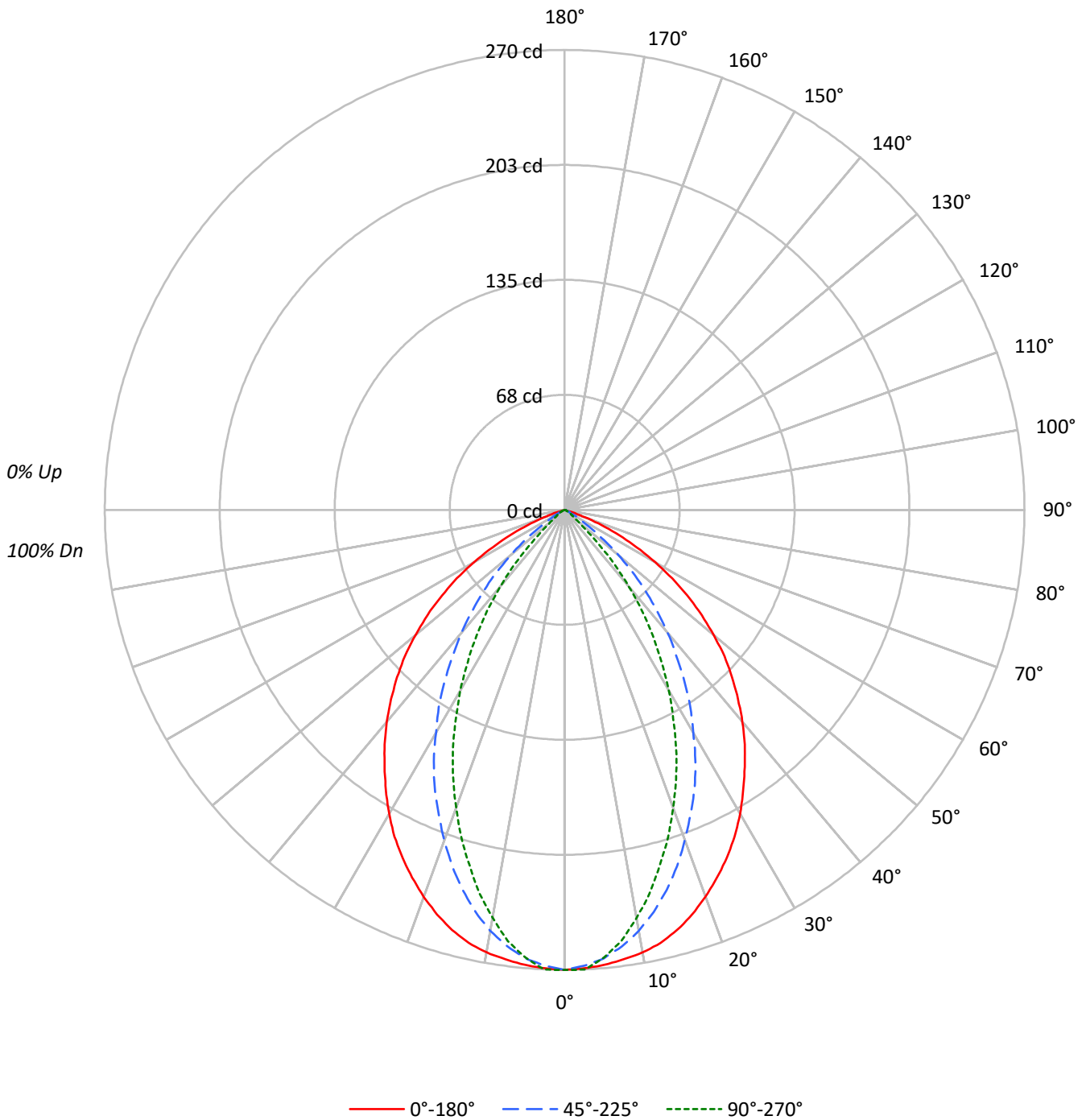
Lumens per Lamp: N/A
Luminaire Lumens: 352.8 lumens
Efficiency: N/A
Efficacy: 28.2 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2326	2326	2326
5°	2318	2285	2281
10°	2308	2195	2127
15°	2276	2060	1925
20°	2215	1892	1706
25°	2141	1714	1473
30°	2049	1502	1219
35°	1937	1289	948
40°	1826	1058	662
45°	1693	813	328
50°	1527	549	110
55°	1318	281	77
60°	1056	102	53
65°	723	55	24
70°	325	30	20
75°	0	13	13
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1693 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.0	7.1
10°-20°	65.4	18.5
20°-30°	84.7	24.0
30°-40°	80.4	22.8
40°-50°	57.0	16.1
50°-60°	29.2	8.3
60°-70°	10.2	2.9
70°-80°	0.9	0.3
80°-90°	0.0	0.0
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°	175.0	49.6
0°-40°	255.4	72.4
0°-60°	341.7	96.8
0°-90°	352.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	352.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	270	270	270	270	270	
5°	268	269	264	264	264	25
15°	255	248	231	220	216	72
25°	225	208	180	161	155	104
35°	184	157	123	99	90	115
45°	139	107	67	38	27	107
55°	88	58	19	6	5	78
65°	36	17	3	2	1	35
75°	0	0	0	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	270.1	270.1	270.1	270.1	270.1
2.5°	269.4	270.1	267.8	269.8	270.1
5°	268.2	268.6	264.3	264.3	263.9
7.5°	266.2	265.5	258.4	255.7	255.3
10°	263.9	261.2	251.0	245.2	243.2
12.5°	260.4	255.3	241.7	233.1	230.7
15°	255.3	247.5	231.1	220.2	215.9
17.5°	249.1	238.9	219.4	206.1	201.8
20°	241.7	228.8	206.5	191.7	186.2
22.5°	233.8	219.0	193.2	176.5	171.0
25°	225.3	207.7	180.4	161.2	155.0
27.5°	216.3	195.6	166.3	146.4	138.2
30°	206.1	183.5	151.1	130.4	122.6
32.5°	195.2	170.2	137.4	115.2	105.8
35°	184.3	157.3	122.6	98.8	90.2
37.5°	173.7	145.2	107.7	82.8	74.6
40°	162.4	132.0	94.1	68.3	58.9
42.5°	150.7	119.1	80.0	53.5	43.3
45°	139.0	107.0	66.8	38.3	26.9
47.5°	127.3	94.1	53.9	24.2	14.4
50°	114.0	81.6	41.0	12.9	8.2
52.5°	101.5	69.9	29.3	7.4	6.2
55°	87.8	57.8	18.7	5.5	5.1
57.5°	75.0	46.1	10.5	4.3	3.9
60°	61.3	35.5	5.9	3.5	3.1
62.5°	47.6	25.8	3.9	2.3	2.0
65°	35.5	17.2	2.7	1.6	1.2
67.5°	23.4	9.8	2.0	0.8	0.8
70°	12.9	4.7	1.2	0.8	0.8
72.5°	4.7	1.6	0.8	0.4	0.4
75°	0.0	0.4	0.4	0.4	0.4
77.5°	0.0	0.0	0.0	0.0	0.4
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)