

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: P1060427

Luminaire Tested: S124RDR-S350D930-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060427
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: S124RDR-S350D930-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

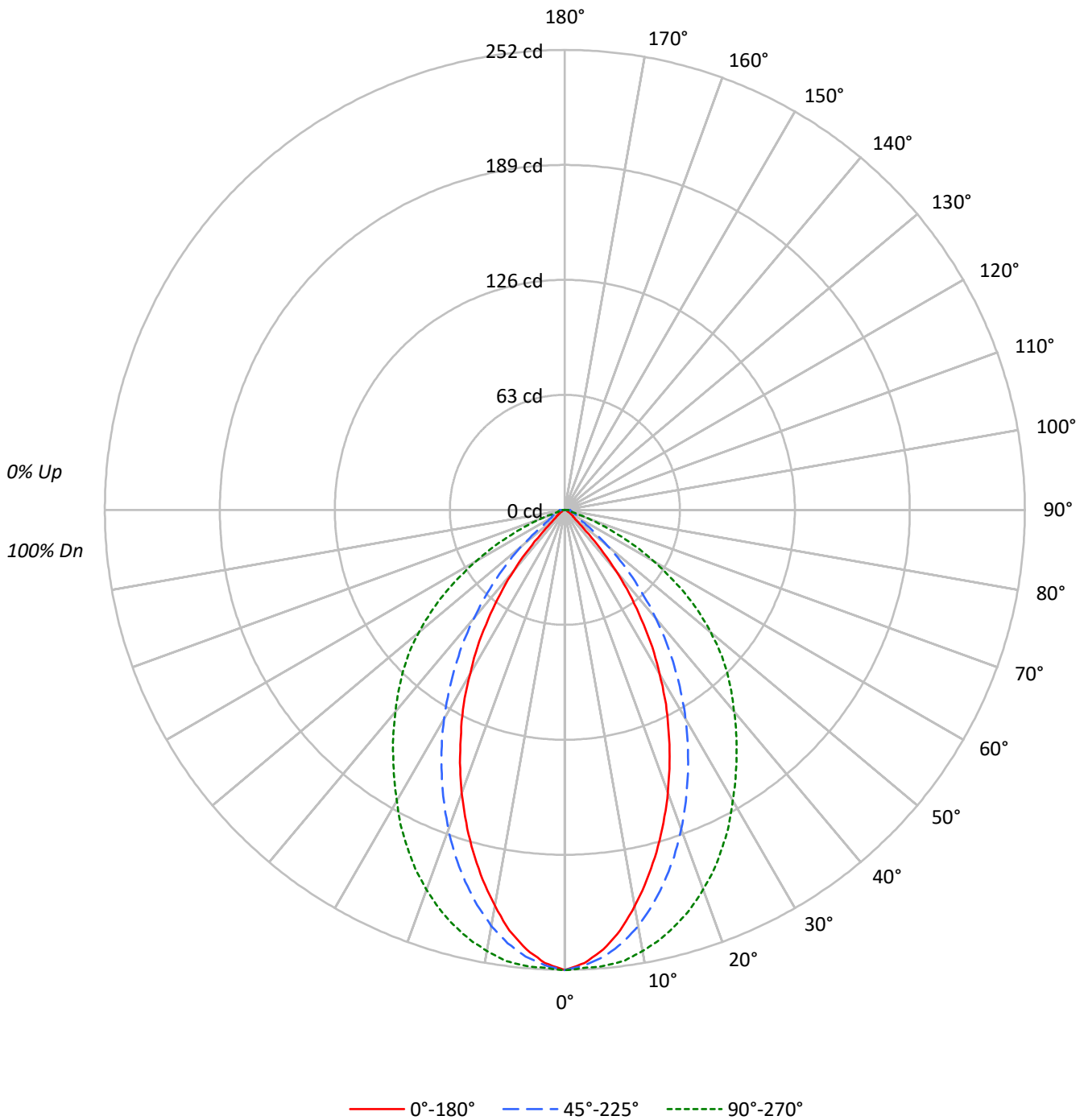
Lumens per Lamp: N/A
Luminaire Lumens: 316.5 lumens
Efficiency: N/A
Efficacy: 25.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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				
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°	2172	2172	2172
5°	2090	2125	2168
10°	1927	2024	2147
15°	1730	1879	2099
20°	1512	1708	2029
25°	1279	1516	1939
30°	1033	1315	1830
35°	768	1099	1724
40°	488	871	1622
45°	195	638	1530
50°	84	407	1396
55°	65	210	1219
60°	47	143	966
65°	35	143	660
70°	33	126	302
75°	43	133	123
80°	64	149	134
85°	128	267	198

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1530 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.1	7.3
10°-20°	59.5	18.8
20°-30°	75.2	23.8
30°-40°	69.1	21.8
40°-50°	47.1	14.9
50°-60°	25.5	8.1
60°-70°	10.8	3.4
70°-80°	3.7	1.2
80°-90°	2.4	0.8
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°	157.8	49.9
0°-40°	226.9	71.7
0°-60°	299.5	94.6
0°-90°	316.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	316.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	252	252	252	252	252	
5°	242	246	246	248	251	22
15°	194	200	211	226	236	54
25°	135	143	160	184	204	62
35°	73	83	104	137	164	45
45°	16	26	52	93	126	15
55°	4	5	14	51	81	4
65°	2	2	7	16	32	2
75°	1	4	4	4	4	1
85°	1	3	3	3	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	252.2	252.2	252.2	252.2	252.2
2.5°	248.5	251.5	249.8	250.5	251.2
5°	241.8	245.5	245.8	247.8	250.8
7.5°	232.5	236.8	239.5	244.5	249.2
10°	220.4	225.8	231.5	239.5	245.5
12.5°	207.7	213.4	221.8	233.1	241.1
15°	194.1	200.4	210.8	225.8	235.5
17.5°	179.7	186.7	199.1	216.8	229.1
20°	165.0	172.7	186.4	206.4	221.4
22.5°	150.0	158.0	173.0	195.7	213.4
25°	134.6	143.3	159.6	184.4	204.1
27.5°	119.9	127.9	146.0	173.0	194.7
30°	103.9	112.9	132.3	161.3	184.0
32.5°	89.2	97.9	118.2	149.3	174.0
35°	73.1	82.8	104.5	137.3	164.0
37.5°	58.1	67.5	91.2	125.9	154.3
40°	43.4	53.1	77.5	114.6	144.3
42.5°	29.1	39.4	64.5	102.9	134.9
45°	16.0	25.7	52.4	92.9	125.6
47.5°	8.3	14.0	41.1	82.8	115.6
50°	6.3	7.7	30.4	71.8	104.2
52.5°	5.3	5.7	20.7	60.8	92.9
55°	4.3	4.7	14.0	51.1	81.2
57.5°	3.3	3.7	10.0	41.7	68.1
60°	2.7	3.0	8.3	32.1	56.1
62.5°	2.0	2.3	8.0	23.7	44.1
65°	1.7	2.0	7.0	16.0	32.4
67.5°	1.3	2.0	6.0	10.4	21.7
70°	1.3	2.7	5.0	6.7	12.0
72.5°	1.3	3.0	4.3	4.3	4.3
75°	1.3	3.7	4.0	3.7	3.7
77.5°	1.3	3.3	3.3	3.3	3.3
80°	1.3	3.0	3.0	3.0	2.7
82.5°	1.3	2.7	3.0	3.0	2.3
85°	1.3	2.7	2.7	2.7	2.0
87.5°	1.0	2.7	2.7	2.7	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)