

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: P1060403

Luminaire Tested: S124RDR-S350D840-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060403
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S350D840-X4F0-XX-UDD-SVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

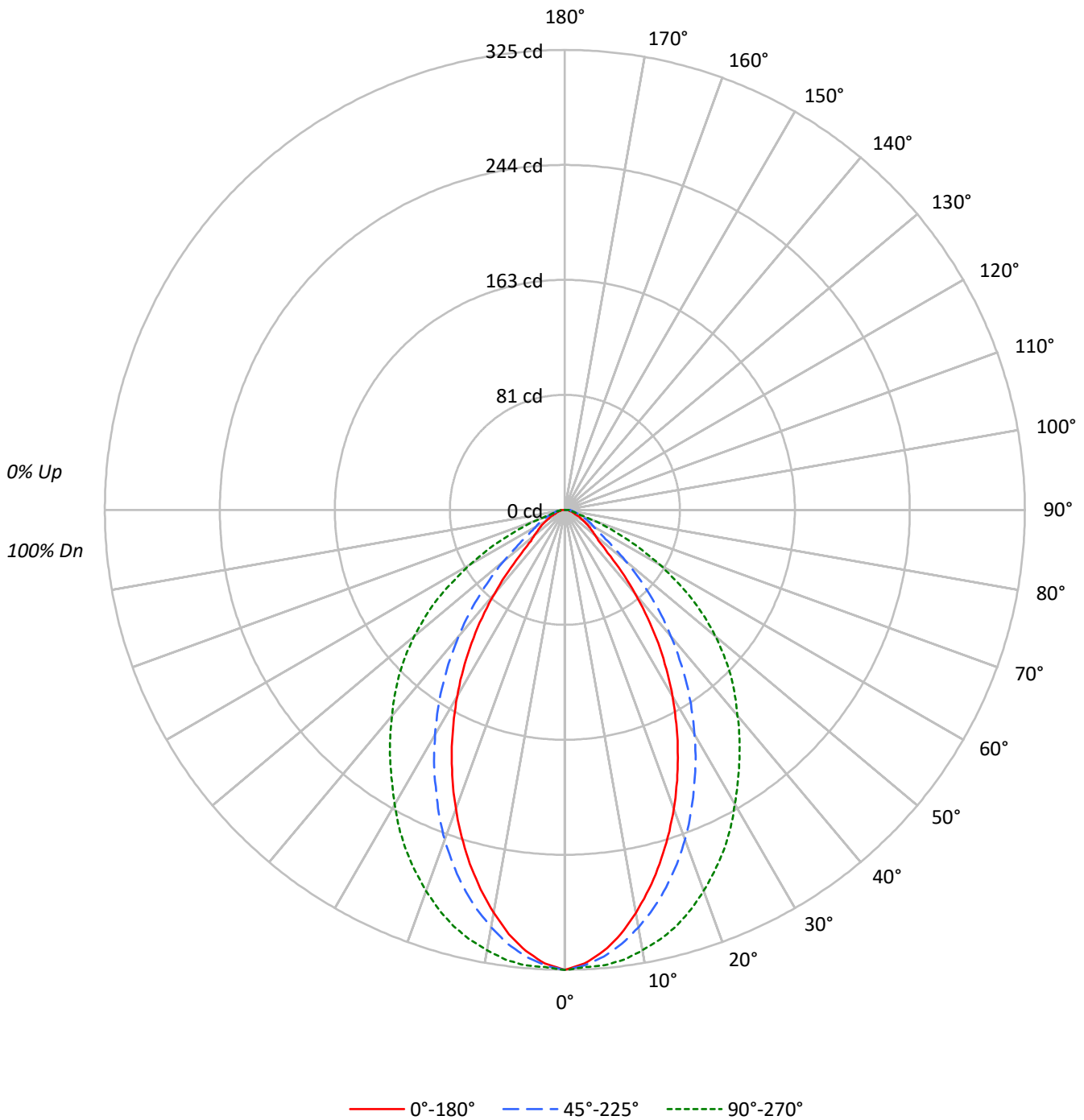
Lumens per Lamp: N/A
Luminaire Lumens: 457.1 lumens
Efficiency: N/A
Efficacy: 36.6 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70
4	90	80	73	68	88	79	73	67	77	71	67	75	70	66	73	68	65	63
5	84	73	66	61	82	72	65	60	70	64	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	49	47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2799	2799	2799
5°	2706	2738	2792
10°	2528	2619	2763
15°	2308	2463	2714
20°	2062	2274	2626
25°	1796	2051	2523
30°	1513	1822	2389
35°	1209	1578	2261
40°	869	1311	2134
45°	524	1033	2020
50°	376	748	1857
55°	317	503	1645
60°	257	400	1324
65°	202	363	952
70°	176	302	511
75°	166	276	246
80°	164	288	223
85°	247	405	287

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2020 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.8	6.5
10°-20°	78.2	17.1
20°-30°	101.5	22.2
30°-40°	97.5	21.3
40°-50°	72.4	15.8
50°-60°	44.3	9.7
60°-70°	21.5	4.7
70°-80°	8.2	1.8
80°-90°	3.7	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°	209.5	45.8
0°-40°	307.0	67.2
0°-60°	423.7	92.7
0°-90°	457.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	457.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	325	325	325	325	325	
5°	313	318	317	320	323	29
15°	259	266	276	293	304	72
25°	189	198	216	244	266	86
35°	115	125	150	186	215	71
45°	43	54	85	130	166	36
55°	21	22	34	76	110	19
65°	10	11	18	28	47	10
75°	5	8	8	7	7	5
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	325.1	325.1	325.1	325.1	325.1
2.5°	321.0	324.7	322.2	323.0	323.4
5°	313.1	317.7	316.8	319.7	323.0
7.5°	302.4	307.7	309.4	315.2	320.6
10°	289.1	295.7	299.5	309.0	316.0
12.5°	274.6	281.7	288.7	301.5	311.0
15°	258.9	266.4	276.3	292.8	304.4
17.5°	242.4	250.6	262.6	282.5	296.1
20°	225.0	233.7	248.2	270.1	286.6
22.5°	207.2	216.3	232.5	256.9	276.3
25°	189.0	198.5	215.9	243.6	265.5
27.5°	170.4	180.3	200.2	229.6	253.5
30°	152.2	161.7	183.2	215.1	240.3
32.5°	133.6	143.5	166.7	200.2	227.5
35°	115.0	125.3	150.1	185.7	215.1
37.5°	96.0	107.1	133.2	171.6	202.7
40°	77.3	88.1	116.6	157.2	189.8
42.5°	59.1	70.7	100.9	142.7	177.9
45°	43.0	53.8	84.8	129.5	165.9
47.5°	32.3	38.9	69.9	117.1	152.6
50°	28.1	29.4	55.8	103.4	138.6
52.5°	24.4	25.2	43.4	88.5	124.5
55°	21.1	21.9	33.5	75.7	109.6
57.5°	17.8	18.6	26.9	63.3	92.6
60°	14.9	15.7	23.2	50.5	76.9
62.5°	12.4	12.8	20.7	38.5	61.6
65°	9.9	10.8	17.8	28.1	46.7
67.5°	8.3	9.1	14.5	19.4	32.7
70°	7.0	9.1	12.0	13.6	20.3
72.5°	5.8	8.3	9.9	9.5	9.5
75°	5.0	7.9	8.3	7.4	7.4
77.5°	4.1	7.0	6.6	6.2	5.8
80°	3.3	5.8	5.8	5.0	4.5
82.5°	2.9	4.5	4.5	4.5	3.7
85°	2.5	4.1	4.1	3.7	2.9
87.5°	1.7	3.3	3.7	3.3	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)