

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: P1060449

Luminaire Tested: S124RDR-S350D940-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060449
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-S350D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

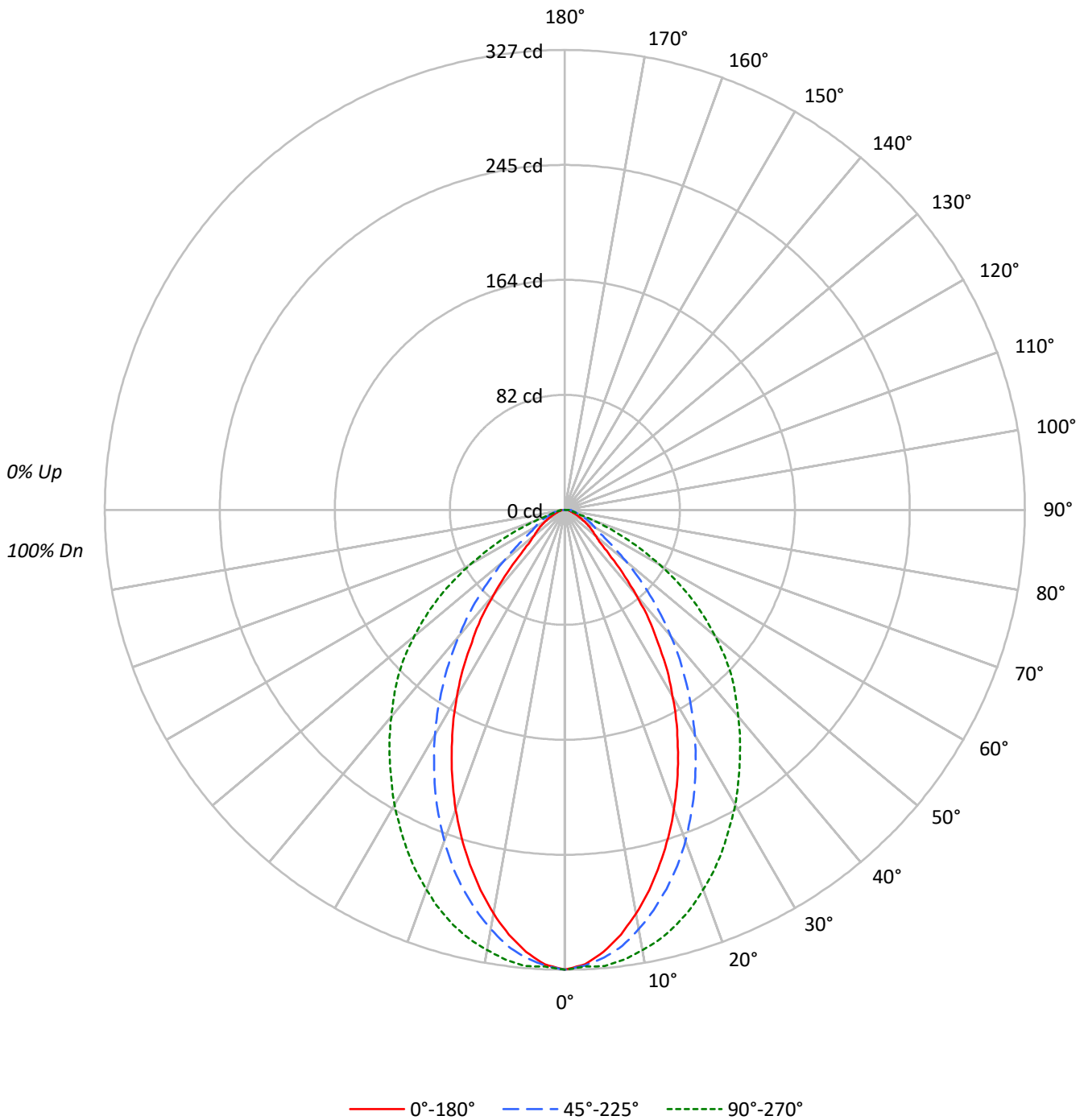
Lumens per Lamp: N/A
Luminaire Lumens: 462.7 lumens
Efficiency: N/A
Efficacy: 37.0 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	77	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°	2815	2815	2815
5°	2728	2763	2814
10°	2549	2648	2779
15°	2325	2488	2725
20°	2078	2296	2635
25°	1808	2075	2526
30°	1525	1838	2408
35°	1213	1582	2281
40°	882	1319	2156
45°	533	1041	2042
50°	382	754	1869
55°	324	510	1651
60°	264	415	1333
65°	208	373	960
70°	174	312	506
75°	156	293	256
80°	164	288	253
85°	217	435	287

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2042 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.1	6.5
10°-20°	78.9	17.0
20°-30°	102.3	22.1
30°-40°	98.5	21.3
40°-50°	73.3	15.8
50°-60°	45.0	9.7
60°-70°	22.1	4.8
70°-80°	8.6	1.9
80°-90°	3.9	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°	211.3	45.7
0°-40°	309.7	66.9
0°-60°	428.0	92.5
0°-90°	462.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	462.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	327	327	327	327	327	
5°	316	320	320	323	326	29
15°	261	269	279	296	306	73
25°	190	200	218	246	266	87
35°	115	126	150	188	217	72
45°	44	54	86	132	168	36
55°	22	22	34	77	110	19
65°	10	11	18	29	47	10
75°	5	8	9	8	8	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°	326.9	326.9	326.9	326.9	326.9
2.5°	323.6	327.3	324.4	324.7	325.1
5°	315.6	320.4	319.6	322.6	325.5
7.5°	304.7	310.1	312.7	318.5	322.6
10°	291.5	297.7	302.8	312.3	317.8
12.5°	276.9	284.2	291.5	304.3	312.7
15°	260.8	269.2	279.1	295.9	305.7
17.5°	244.4	252.8	265.6	284.9	297.3
20°	226.8	236.0	250.6	272.1	287.5
22.5°	208.6	218.4	234.5	259.0	277.3
25°	190.3	200.5	218.4	245.8	265.9
27.5°	172.1	181.9	201.3	232.0	253.9
30°	153.4	163.6	184.8	217.0	242.2
32.5°	135.5	145.0	167.7	202.7	229.4
35°	115.4	126.4	150.5	188.1	217.0
37.5°	98.3	108.1	134.1	173.5	204.6
40°	78.5	89.5	117.3	159.3	191.8
42.5°	60.3	71.2	101.2	145.0	179.7
45°	43.8	54.4	85.5	131.9	167.7
47.5°	33.2	39.5	70.1	119.1	154.2
50°	28.5	30.3	56.3	105.2	139.5
52.5°	25.2	25.9	43.8	91.3	124.9
55°	21.6	22.3	34.0	77.4	110.0
57.5°	18.3	18.6	27.4	64.3	93.9
60°	15.3	15.7	24.1	51.5	77.4
62.5°	12.8	13.2	21.6	39.8	61.7
65°	10.2	11.0	18.3	29.2	47.1
67.5°	8.4	9.9	15.3	20.5	32.9
70°	6.9	9.5	12.4	14.2	20.1
72.5°	5.8	8.8	10.6	10.2	9.9
75°	4.7	8.4	8.8	8.0	7.7
77.5°	4.0	7.3	7.3	6.6	6.2
80°	3.3	5.8	5.8	5.8	5.1
82.5°	2.9	4.7	5.1	5.1	4.0
85°	2.2	4.0	4.4	4.4	2.9
87.5°	1.5	3.7	4.0	3.7	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)