

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: P1060406

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060406
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S350D840-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

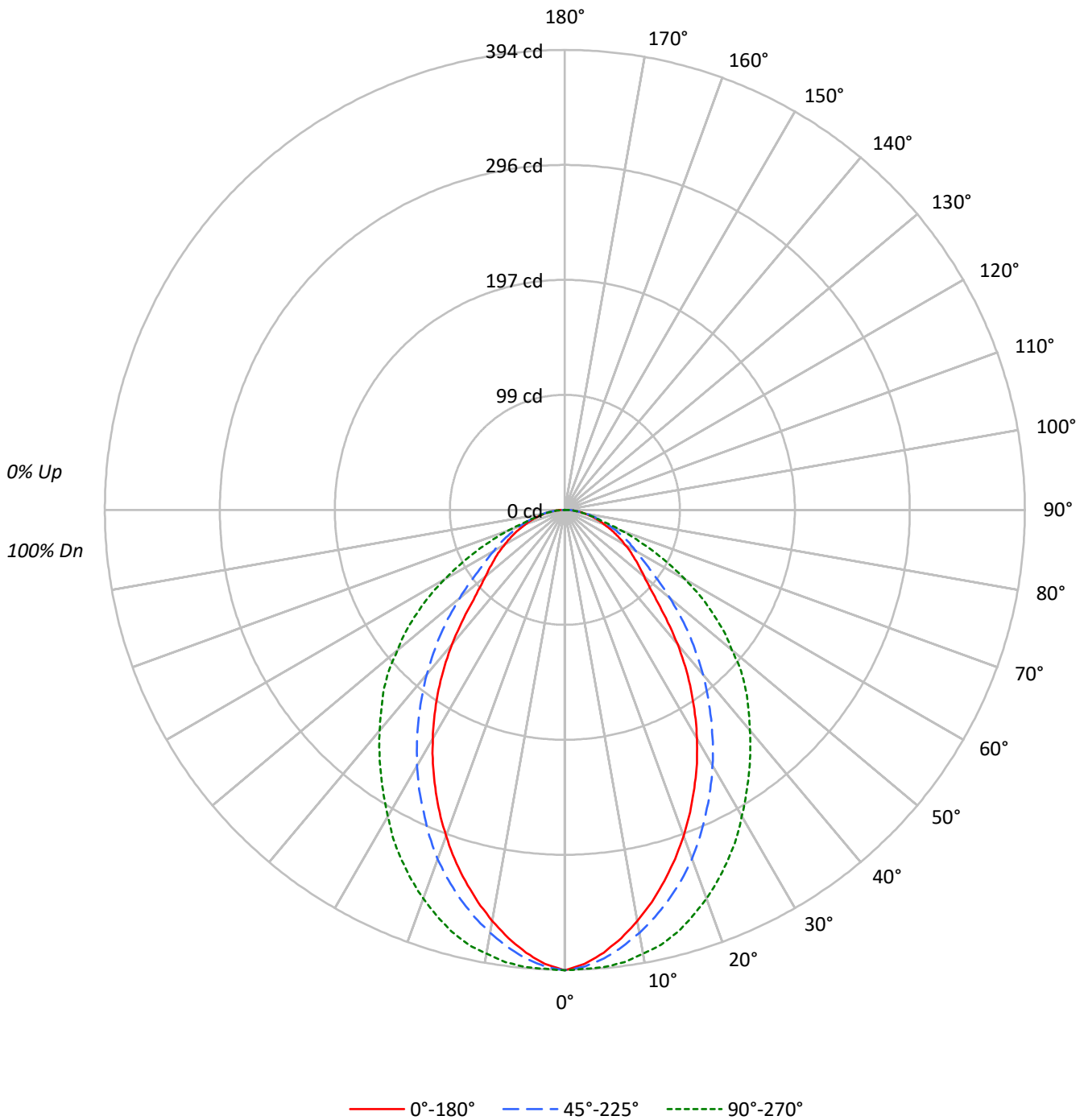
Lumens per Lamp: N/A
Luminaire Lumens: 718.2 lumens
Efficiency: N/A
Efficacy: 57.5 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87																																				
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75																																				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65																																				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57																																				
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50																																				
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45																																				
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41																																				
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37																																				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34																																				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31																																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3397	3397	3397
5°	3292	3335	3399
10°	3128	3218	3377
15°	2934	3078	3336
20°	2724	2918	3248
25°	2495	2718	3143
30°	2249	2516	3014
35°	1982	2295	2891
40°	1687	2068	2774
45°	1370	1828	2674
50°	1186	1573	2504
55°	1099	1335	2321
60°	1025	1204	2037
65°	960	1129	1693
70°	896	1040	1282
75°	852	962	922
80°	798	883	779
85°	731	820	613

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2674 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.4	5.1
10°-20°	97.9	13.6
20°-30°	133.7	18.6
30°-40°	140.0	19.5
40°-50°	121.2	16.9
50°-60°	91.1	12.7
60°-70°	58.7	8.2
70°-80°	30.1	4.2
80°-90°	9.0	1.3
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°	268.0	37.3
0°-40°	408.0	56.8
0°-60°	620.3	86.4
0°-90°	718.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	718.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	394	394	394	394	394	
5°	381	387	386	389	393	36
15°	329	337	345	361	374	92
25°	263	272	286	308	331	120
35°	188	199	218	247	275	117
45°	112	124	150	187	220	89
55°	73	76	89	127	155	66
65°	47	48	55	67	83	47
75°	26	28	29	28	28	27
85°	7	9	8	8	6	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	394.5	394.5	394.5	394.5	394.5
2.5°	389.5	394.5	391.6	392.4	393.6
5°	380.8	386.6	385.8	388.7	393.2
7.5°	370.1	376.3	377.5	384.1	390.7
10°	357.7	364.7	368.0	377.9	386.2
12.5°	344.0	351.5	357.2	369.6	381.6
15°	329.1	337.4	345.3	361.0	374.2
17.5°	313.8	322.1	332.4	349.8	364.7
20°	297.3	306.4	318.4	336.6	354.4
22.5°	280.3	289.8	302.7	322.5	343.2
25°	262.6	272.5	286.1	308.5	330.8
27.5°	244.8	254.7	270.0	293.6	318.0
30°	226.2	236.5	253.0	278.7	303.1
32.5°	207.6	218.7	235.7	263.0	289.0
35°	188.5	199.3	218.3	247.3	275.0
37.5°	169.5	180.7	201.0	232.0	260.9
40°	150.1	161.7	184.0	216.7	246.8
42.5°	130.7	143.1	166.6	201.0	232.8
45°	112.5	124.0	150.1	186.9	219.6
47.5°	98.8	106.7	133.6	173.2	204.7
50°	88.5	92.6	117.4	158.4	186.9
52.5°	80.6	83.5	102.5	142.2	172.4
55°	73.2	75.7	88.9	126.9	154.6
57.5°	66.6	67.8	78.6	112.1	137.7
60°	59.5	60.8	69.9	95.9	118.3
62.5°	53.3	54.2	62.8	80.6	100.5
65°	47.1	48.0	55.4	67.0	83.1
67.5°	41.3	42.6	48.4	54.6	66.2
70°	35.6	38.0	41.3	44.2	50.9
72.5°	30.6	33.1	34.7	35.6	36.0
75°	25.6	28.5	28.9	28.5	27.7
77.5°	20.7	23.2	23.2	22.3	21.5
80°	16.1	18.2	17.8	17.0	15.7
82.5°	12.0	13.2	12.8	12.0	10.8
85°	7.4	8.7	8.3	7.9	6.2
87.5°	3.7	5.0	4.5	4.1	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)