

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: P1060441

Luminaire Tested: S124RDR-S350D935-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060441
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-37)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S350D935-X4F0-XX-UDD-WVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

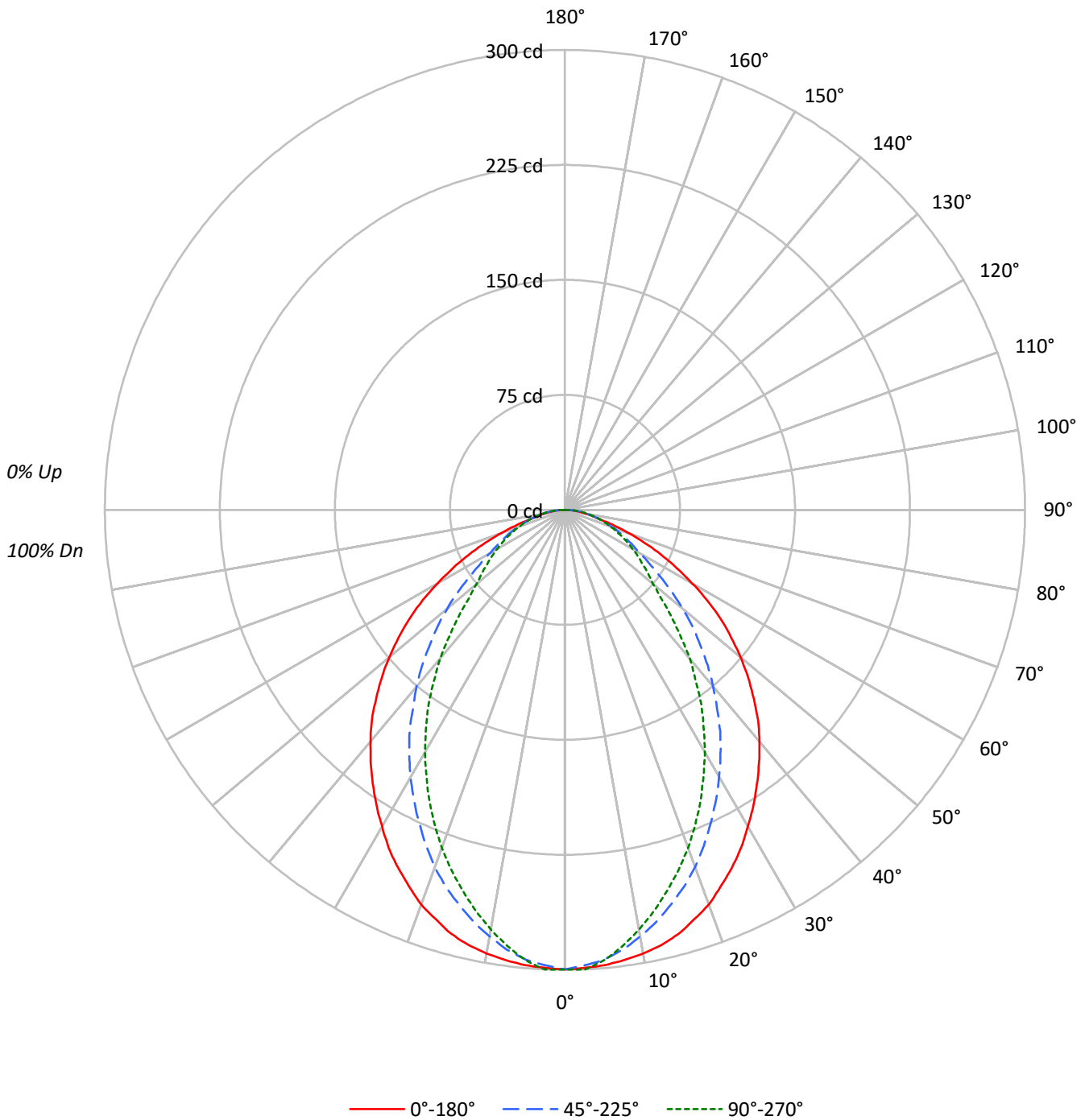
Lumens per Lamp: N/A
Luminaire Lumens: 578.1 lumens
Efficiency: N/A
Efficacy: 46.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88				86	
2	101	94	88	83	99	92	86	82	89	84	80	85	82	78	82	79	76				74	
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66				64	
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58				56	
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52				50	
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46				44	
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42				40	
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38				36	
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35				33	
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32				30	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2582	2582	2582
5°	2577	2546	2549
10°	2569	2471	2431
15°	2553	2378	2293
20°	2512	2273	2151
25°	2448	2139	1989
30°	2371	2001	1815
35°	2296	1855	1629
40°	2218	1691	1422
45°	2120	1519	1189
50°	2001	1341	1005
55°	1862	1138	931
60°	1650	964	880
65°	1408	890	833
70°	1100	826	791
75°	749	762	762
80°	645	714	734
85°	553	692	771

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2120 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.9	4.8
10°-20°	75.8	13.1
20°-30°	105.2	18.2
30°-40°	112.7	19.5
40°-50°	99.9	17.3
50°-60°	75.3	13.0
60°-70°	48.7	8.4
70°-80°	25.0	4.3
80°-90°	7.7	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°	208.8	36.1
0°-40°	321.6	55.6
0°-60°	496.7	85.9
0°-90°	578.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	578.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	300	300	300	300	300	
5°	298	298	294	295	295	28
15°	286	280	267	260	257	81
25°	258	244	225	213	209	119
35°	218	199	176	161	155	137
45°	174	152	125	105	98	134
55°	124	103	76	64	62	110
65°	69	56	44	41	41	68
75°	22	24	23	23	23	27
85°	6	6	7	8	8	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	299.8	299.8	299.8	299.8	299.8
2.5°	299.1	300.2	297.4	299.5	300.2
5°	298.1	298.4	294.5	294.9	294.9
7.5°	296.3	295.6	289.3	287.5	287.1
10°	293.8	291.7	282.6	279.0	278.0
12.5°	290.7	286.8	275.2	270.2	268.1
15°	286.4	280.1	266.7	260.0	257.2
17.5°	280.1	272.0	257.9	249.4	246.3
20°	274.1	263.2	248.0	237.5	234.7
22.5°	265.7	254.0	236.8	225.5	222.0
25°	257.6	243.8	225.1	213.2	209.3
27.5°	248.7	233.2	213.2	200.5	195.5
30°	238.5	222.0	201.2	187.8	182.5
32.5°	228.7	211.0	188.8	174.1	168.4
35°	218.4	198.7	176.5	160.7	155.0
37.5°	207.9	187.1	162.8	147.3	139.9
40°	197.3	175.5	150.4	132.8	126.5
42.5°	186.4	163.5	137.8	119.4	111.3
45°	174.1	151.5	124.7	105.3	97.6
47.5°	162.1	139.9	112.7	91.6	84.6
50°	149.4	127.5	100.1	79.6	75.0
52.5°	136.7	114.9	87.7	70.5	68.4
55°	124.0	103.2	75.8	63.8	62.0
57.5°	109.9	91.3	65.2	57.8	56.4
60°	95.8	78.2	56.0	52.1	51.1
62.5°	82.1	66.9	49.7	46.5	45.8
65°	69.1	55.7	43.7	41.2	40.9
67.5°	56.4	45.8	38.1	36.6	35.9
70°	43.7	36.6	32.8	32.1	31.4
72.5°	32.4	29.6	27.8	27.5	27.1
75°	22.5	23.6	22.9	22.9	22.9
77.5°	18.0	18.3	18.7	19.0	18.7
80°	13.0	14.1	14.4	15.2	14.8
82.5°	9.2	9.9	10.9	11.3	11.6
85°	5.6	6.0	7.0	7.8	7.8
87.5°	2.5	2.8	3.5	4.2	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)