

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: P1060414

Luminaire Tested: S124RDR-S350D850-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060414
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-S350D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

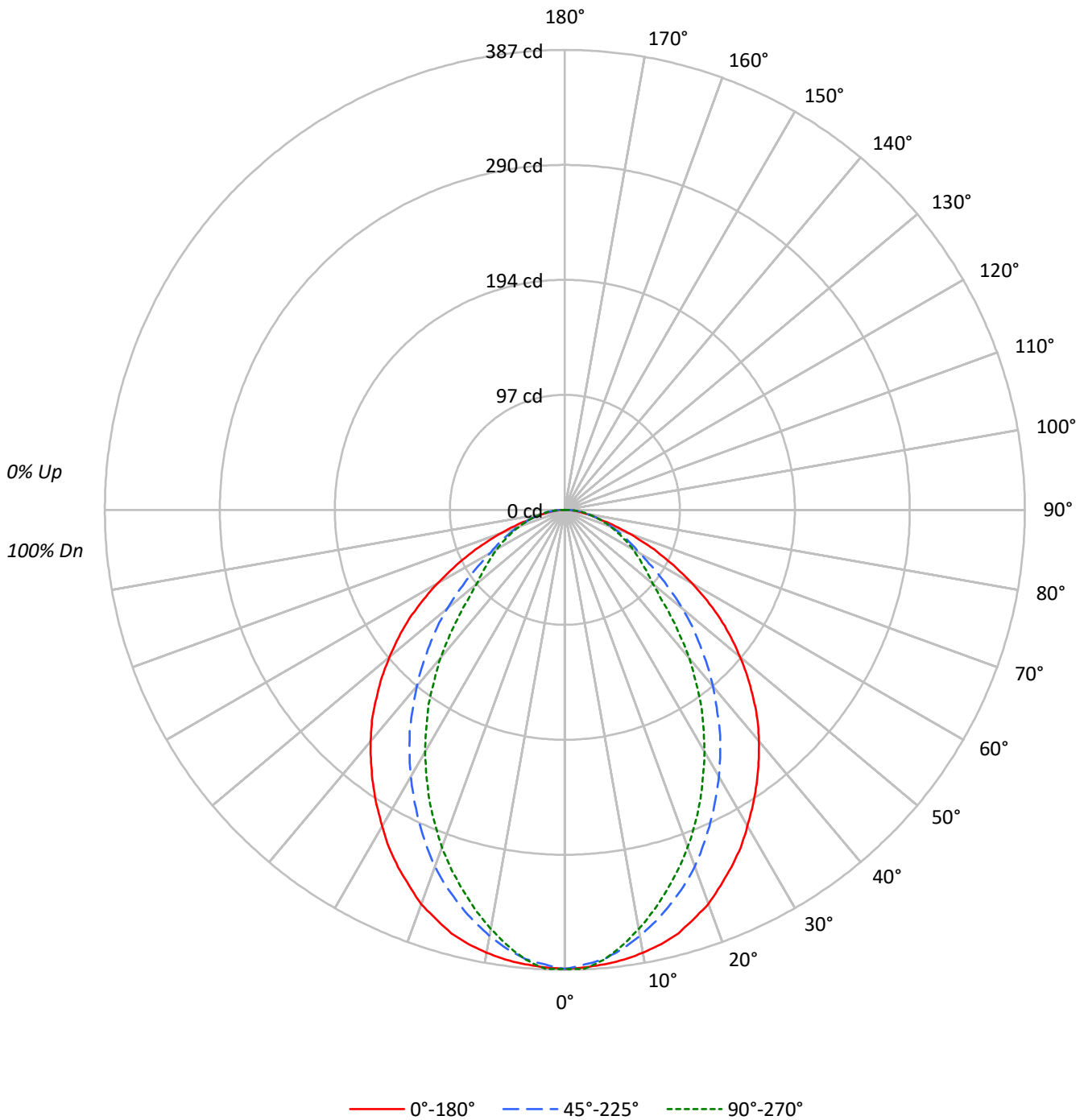
Lumens per Lamp: N/A
Luminaire Lumens: 744.7 lumens
Efficiency: N/A
Efficacy: 59.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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				
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°	3326	3326	3326
5°	3318	3280	3283
10°	3310	3183	3131
15°	3290	3062	2954
20°	3236	2928	2769
25°	3152	2755	2562
30°	3055	2576	2338
35°	2958	2390	2099
40°	2856	2179	1831
45°	2730	1957	1531
50°	2577	1727	1295
55°	2398	1465	1200
60°	2125	1243	1133
65°	1811	1147	1072
70°	1417	1062	1017
75°	965	981	981
80°	833	922	947
85°	721	899	988

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2730 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.9	4.8
10°-20°	97.6	13.1
20°-30°	135.5	18.2
30°-40°	145.2	19.5
40°-50°	128.7	17.3
50°-60°	96.9	13.0
60°-70°	62.8	8.4
70°-80°	32.2	4.3
80°-90°	9.9	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°	269.0	36.1
0°-40°	414.2	55.6
0°-60°	639.8	85.9
0°-90°	744.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	744.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	386	386	386	386	386	
5°	384	384	379	380	380	36
15°	369	361	344	335	331	104
25°	332	314	290	275	270	153
35°	281	256	227	207	200	176
45°	224	195	161	136	126	173
55°	160	133	98	82	80	142
65°	89	72	56	53	53	88
75°	29	30	30	30	30	34
85°	7	8	9	10	10	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	386.2	386.2	386.2	386.2	386.2
2.5°	385.3	386.6	383.0	385.7	386.6
5°	383.9	384.4	379.4	379.8	379.8
7.5°	381.7	380.8	372.6	370.3	369.9
10°	378.5	375.8	364.0	359.4	358.1
12.5°	374.4	369.4	354.4	348.1	345.4
15°	369.0	360.8	343.5	334.9	331.3
17.5°	360.8	350.3	332.2	321.3	317.2
20°	353.1	339.0	319.5	305.9	302.2
22.5°	342.2	327.2	305.0	290.4	285.9
25°	331.7	314.0	290.0	274.6	269.6
27.5°	320.4	300.4	274.6	258.2	251.9
30°	307.2	285.9	259.1	241.9	235.1
32.5°	294.5	271.8	243.2	224.2	216.9
35°	281.4	256.0	227.4	206.9	199.7
37.5°	267.8	241.0	209.7	189.7	180.2
40°	254.1	226.0	193.8	171.1	162.9
42.5°	240.1	210.6	177.4	153.8	143.4
45°	224.2	195.1	160.7	135.7	125.7
47.5°	208.8	180.2	145.2	118.0	108.9
50°	192.4	164.3	128.9	102.6	96.7
52.5°	176.1	147.9	113.0	90.8	88.0
55°	159.7	133.0	97.6	82.1	79.9
57.5°	141.6	117.5	84.0	74.4	72.6
60°	123.4	100.7	72.2	67.2	65.8
62.5°	105.7	86.2	64.0	59.9	59.0
65°	88.9	71.7	56.3	53.1	52.6
67.5°	72.6	59.0	49.0	47.2	46.3
70°	56.3	47.2	42.2	41.3	40.4
72.5°	41.8	38.1	35.9	35.4	34.9
75°	29.0	30.4	29.5	29.5	29.5
77.5°	23.1	23.6	24.1	24.5	24.1
80°	16.8	18.2	18.6	19.5	19.1
82.5°	11.8	12.7	14.1	14.5	15.0
85°	7.3	7.7	9.1	10.0	10.0
87.5°	3.2	3.6	4.5	5.4	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)