

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: P1060509

Luminaire Tested: S124RDR-S575D930-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060509
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S575D930-X4F0-XX-UDD-BVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

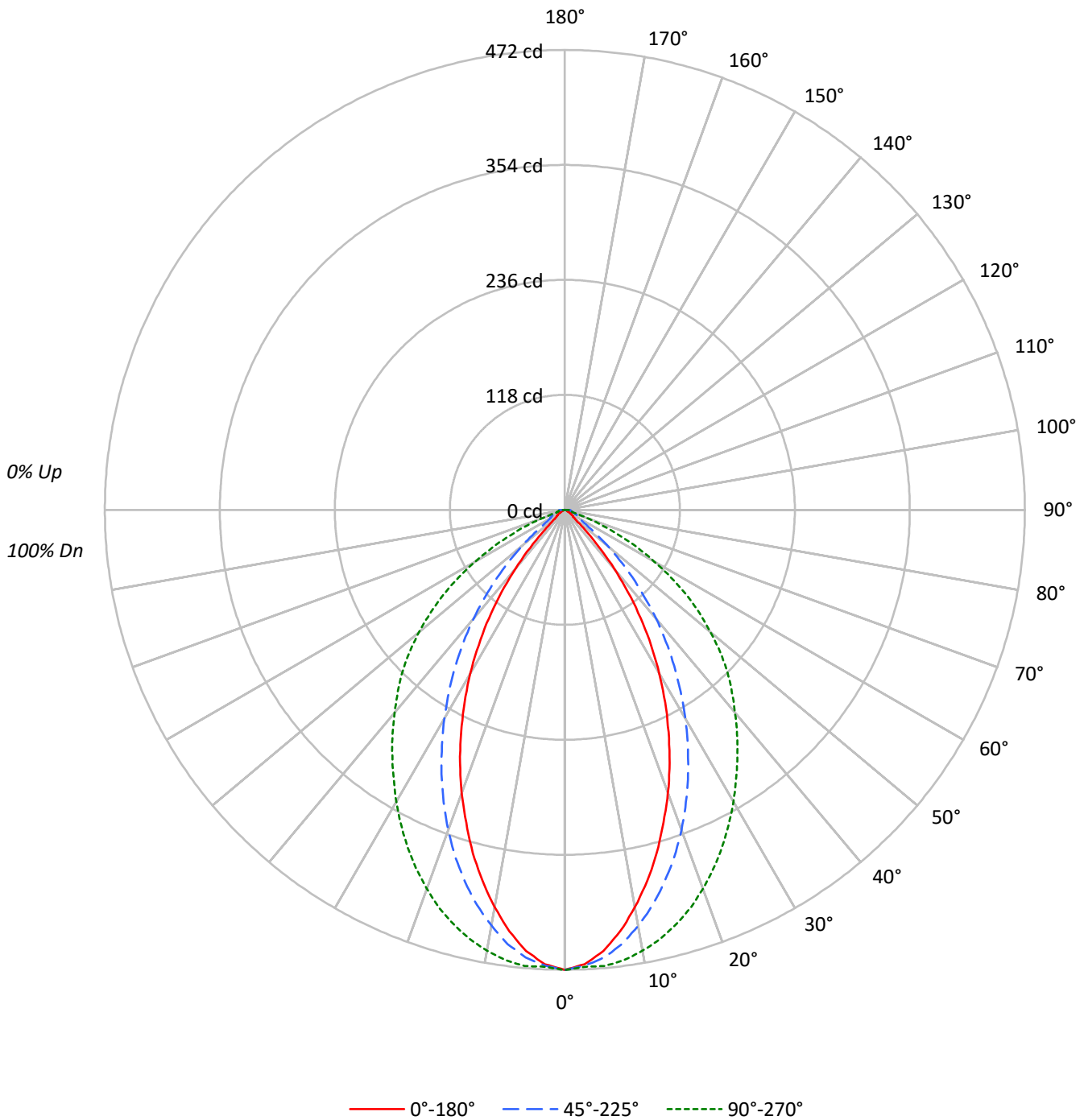
Lumens per Lamp: N/A
Luminaire Lumens: 595.2 lumens
Efficiency: N/A
Efficacy: 30.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4066	4066	4066
5°	3929	3986	4063
10°	3620	3790	4018
15°	3251	3523	3928
20°	2834	3205	3794
25°	2391	2844	3629
30°	1929	2458	3439
35°	1428	2057	3245
40°	885	1639	3053
45°	351	1195	2875
50°	155	750	2614
55°	125	390	2288
60°	86	296	1824
65°	57	293	1253
70°	55	264	587
75°	73	260	260
80°	109	302	302
85°	217	603	435

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2875 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.3	7.3
10°-20°	111.8	18.8
20°-30°	141.1	23.7
30°-40°	129.5	21.8
40°-50°	88.2	14.8
50°-60°	48.0	8.1
60°-70°	20.8	3.5
70°-80°	7.6	1.3
80°-90°	4.9	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°	296.2	49.8
0°-40°	425.7	71.5
0°-60°	561.9	94.4
0°-90°	595.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	595.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	472	472	472	472	472	
5°	454	461	461	466	470	42
15°	365	377	395	423	441	101
25°	252	269	299	347	382	115
35°	136	156	196	258	309	84
45°	29	48	98	174	236	27
55°	8	9	26	96	152	7
65°	3	4	14	30	62	3
75°	2	7	8	8	8	2
85°	2	5	6	6	4	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	472.2	472.2	472.2	472.2	472.2
2.5°	466.7	472.2	468.3	469.4	469.4
5°	454.5	460.6	461.1	466.1	470.0
7.5°	436.2	445.1	449.5	459.5	466.1
10°	414.0	424.6	433.4	450.6	459.5
12.5°	390.2	402.4	415.7	438.4	451.2
15°	364.7	377.4	395.2	423.4	440.6
17.5°	336.4	351.9	373.6	407.4	428.4
20°	309.3	324.8	349.7	388.0	414.0
22.5°	281.0	297.1	324.8	367.5	398.5
25°	251.6	269.4	299.3	347.0	381.9
27.5°	222.8	241.7	273.2	325.3	364.1
30°	194.0	212.8	247.2	303.2	345.9
32.5°	164.6	184.0	221.1	279.9	327.0
35°	135.8	155.7	195.7	257.7	308.7
37.5°	106.4	127.5	170.2	236.1	290.4
40°	78.7	99.8	145.8	214.5	271.6
42.5°	52.7	73.7	120.8	193.4	253.8
45°	28.8	48.2	98.1	174.0	236.1
47.5°	15.5	26.6	75.9	155.2	216.2
50°	11.6	14.4	56.0	135.2	195.1
52.5°	10.0	11.1	38.8	114.2	174.0
55°	8.3	8.9	26.0	95.9	152.4
57.5°	6.7	7.2	19.4	77.6	129.1
60°	5.0	6.1	17.2	59.9	105.9
62.5°	3.9	5.0	16.1	43.8	83.7
65°	2.8	3.9	14.4	29.9	61.5
67.5°	2.8	4.4	12.2	19.4	41.6
70°	2.2	6.1	10.5	12.7	23.3
72.5°	2.2	6.7	8.9	8.9	8.9
75°	2.2	7.2	7.8	7.8	7.8
77.5°	2.2	6.7	7.2	6.7	6.7
80°	2.2	6.1	6.1	6.1	6.1
82.5°	2.2	5.5	6.1	6.1	5.0
85°	2.2	5.0	6.1	6.1	4.4
87.5°	1.7	5.0	5.5	5.5	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)