

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: P1060259

Luminaire Tested: S124RDR-S1020D927-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060259
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S1020D927-X4F0-XX-UDD-SVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

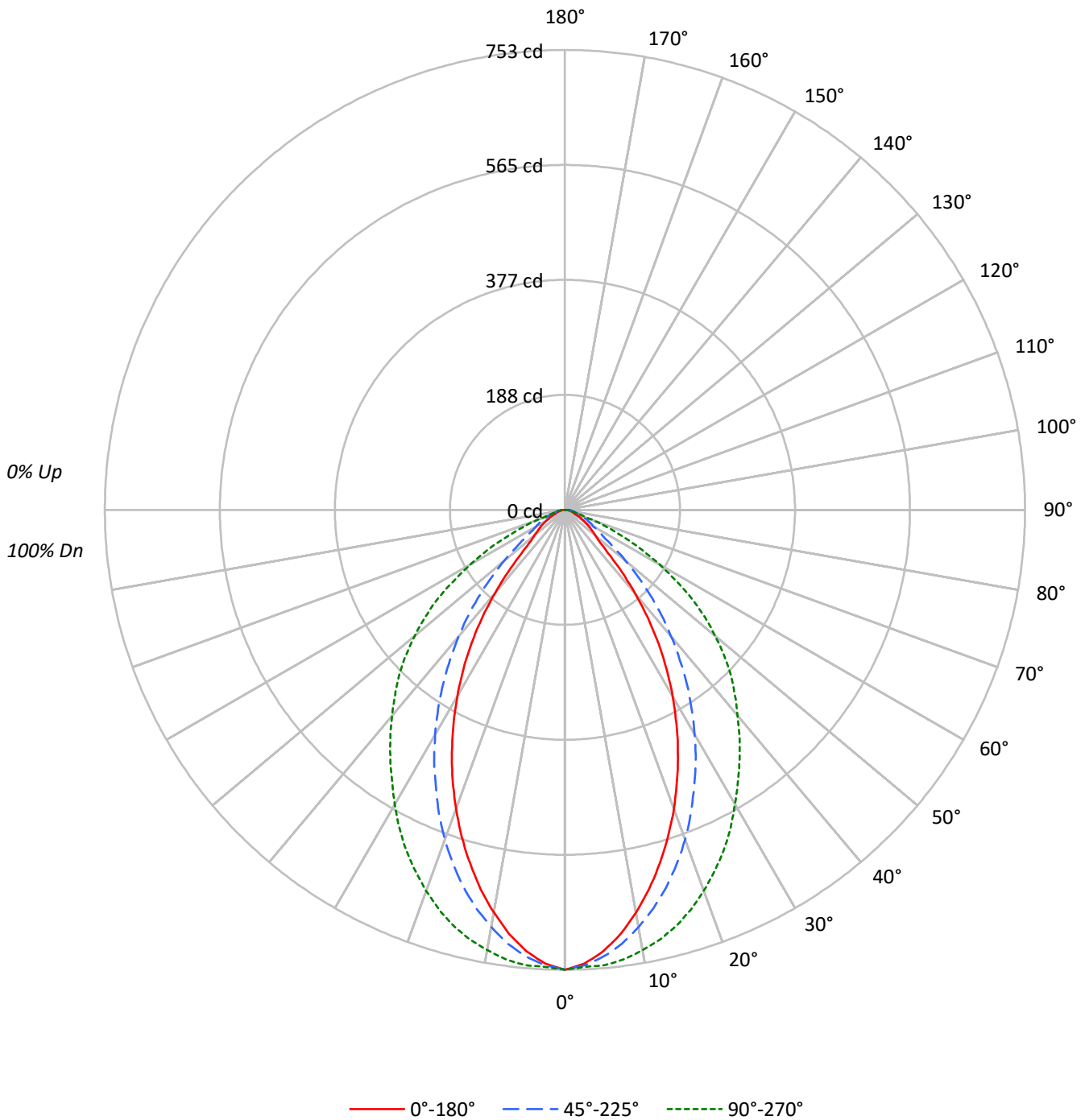
Lumens per Lamp: N/A
Luminaire Lumens: 1058.7 lumens
Efficiency: N/A
Efficacy: 30.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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																		
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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89																												
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79																												
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70																												
4	90	80	73	68	88	79	72	67	77	71	67	75	70	66	73	68	65	63																												
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57																												
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51																												
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	49	47																												
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43																												
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39																												
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6483	6483	6483
5°	6269	6343	6467
10°	5855	6064	6400
15°	5346	5705	6285
20°	4775	5267	6083
25°	4160	4751	5843
30°	3505	4220	5534
35°	2799	3655	5236
40°	2013	3036	4943
45°	1213	2392	4678
50°	872	1732	4299
55°	734	1165	3812
60°	594	923	3069
65°	469	839	2205
70°	410	700	1181
75°	383	639	572
80°	382	664	521
85°	563	948	662

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4678 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.1	6.5
10°-20°	181.1	17.1
20°-30°	235.0	22.2
30°-40°	225.9	21.3
40°-50°	167.6	15.8
50°-60°	102.7	9.7
60°-70°	49.9	4.7
70°-80°	19.0	1.8
80°-90°	8.5	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°	485.2	45.8
0°-40°	711.1	67.2
0°-60°	981.3	92.7
0°-90°	1058.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1058.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	753	753	753	753	753	
5°	725	736	734	740	748	67
15°	600	617	640	678	705	167
25°	438	460	500	564	615	200
35°	266	290	348	430	498	165
45°	100	124	196	300	384	83
55°	49	51	78	175	254	44
65°	23	25	41	65	108	24
75°	12	18	19	17	17	12
85°	6	10	10	9	7	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	752.9	752.9	752.9	752.9	752.9
2.5°	743.4	752.0	746.2	748.1	749.1
5°	725.2	735.7	733.8	740.5	748.1
7.5°	700.2	712.7	716.5	729.9	742.4
10°	669.6	684.9	693.5	715.6	731.9
12.5°	636.1	652.3	668.6	698.3	720.4
15°	599.7	616.9	639.9	678.2	705.0
17.5°	561.3	580.5	608.3	654.3	685.9
20°	521.1	541.2	574.8	625.5	663.8
22.5°	479.9	501.0	538.4	594.9	639.9
25°	437.8	459.8	500.0	564.2	615.0
27.5°	394.7	417.7	463.6	531.7	587.2
30°	352.5	374.6	424.4	498.1	556.6
32.5°	309.4	332.4	386.0	463.6	526.9
35°	266.3	290.3	347.7	430.1	498.1
37.5°	222.2	248.1	308.5	397.5	469.4
40°	179.1	204.0	270.1	364.0	439.7
42.5°	137.0	163.8	233.7	330.5	411.9
45°	99.6	124.5	196.4	299.8	384.1
47.5°	74.7	90.0	161.9	271.1	353.5
50°	65.1	68.0	129.3	239.5	320.9
52.5°	56.5	58.4	100.6	205.0	288.3
55°	48.9	50.8	77.6	175.3	253.9
57.5°	41.2	43.1	62.3	146.6	214.6
60°	34.5	36.4	53.6	116.9	178.2
62.5°	28.7	29.7	47.9	89.1	142.7
65°	23.0	24.9	41.2	65.1	108.2
67.5°	19.2	21.1	33.5	45.0	75.7
70°	16.3	21.1	27.8	31.6	46.9
72.5°	13.4	19.2	23.0	22.0	22.0
75°	11.5	18.2	19.2	17.2	17.2
77.5°	9.6	16.3	15.3	14.4	13.4
80°	7.7	13.4	13.4	11.5	10.5
82.5°	6.7	10.5	10.5	10.5	8.6
85°	5.7	9.6	9.6	8.6	6.7
87.5°	3.8	7.7	8.6	7.7	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)