

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: P1060530

Luminaire Tested: S124RDR-S575D940-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060530
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-74)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S575D940-X4F0-XX-UDD-SVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

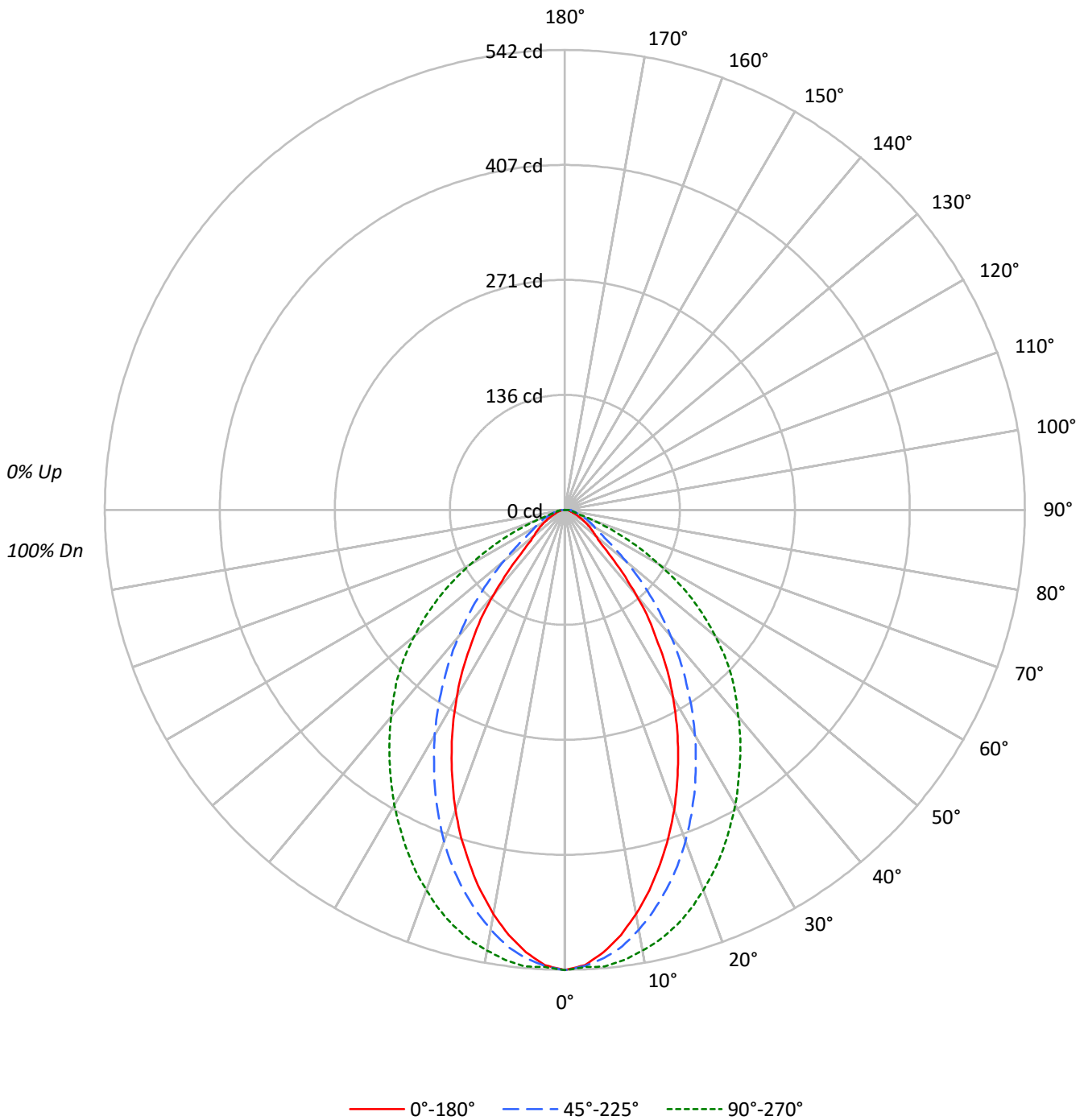
Lumens per Lamp: N/A
Luminaire Lumens: 767.7 lumens
Efficiency: N/A
Efficacy: 39.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79				79
3	97	88	82	76	94	87	81	76	84	79	75	81	77	73	79	75	72	70				70
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63				63
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57				57
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51				51
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47				47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43				43
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4671	4671	4671
5°	4526	4584	4668
10°	4229	4393	4611
15°	3857	4128	4523
20°	3449	3810	4371
25°	3001	3443	4192
30°	2531	3050	3995
35°	2013	2625	3784
40°	1465	2186	3577
45°	885	1727	3388
50°	634	1250	3101
55°	537	847	2738
60°	439	689	2213
65°	346	617	1593
70°	290	519	838
75°	263	482	423
80°	273	481	422
85°	356	721	474

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3388 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.9	6.5
10°-20°	130.9	17.0
20°-30°	169.7	22.1
30°-40°	163.4	21.3
40°-50°	121.5	15.8
50°-60°	74.8	9.7
60°-70°	36.7	4.8
70°-80°	14.3	1.9
80°-90°	6.5	0.9
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°	350.5	45.7
0°-40°	513.9	66.9
0°-60°	710.2	92.5
0°-90°	767.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	767.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	542	542	542	542	542	
5°	524	532	530	535	540	49
15°	433	447	463	491	507	121
25°	316	333	362	408	441	144
35°	192	210	250	312	360	120
45°	73	90	142	219	278	60
55°	36	37	56	128	182	32
65°	17	18	30	48	78	17
75°	8	14	14	13	13	9
85°	4	7	7	7	5	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	542.4	542.4	542.4	542.4	542.4
2.5°	537.0	543.0	538.2	538.8	539.4
5°	523.6	531.5	530.3	535.1	540.0
7.5°	505.5	514.5	518.8	528.5	535.1
10°	483.6	493.9	502.4	518.2	527.3
12.5°	459.4	471.5	483.6	504.8	518.8
15°	432.7	446.7	463.0	490.9	507.3
17.5°	405.5	419.4	440.6	472.7	493.3
20°	376.4	391.5	415.8	451.5	477.0
22.5°	346.1	362.4	389.1	429.7	460.0
25°	315.8	332.7	362.4	407.9	441.2
27.5°	285.5	301.8	333.9	384.8	421.2
30°	254.5	271.5	306.7	360.0	401.8
32.5°	224.8	240.6	278.2	336.4	380.6
35°	191.5	209.7	249.7	312.1	360.0
37.5°	163.0	179.4	222.4	287.9	339.4
40°	130.3	148.5	194.5	264.2	318.2
42.5°	100.0	118.2	167.9	240.6	298.2
45°	72.7	90.3	141.8	218.8	278.2
47.5°	55.2	65.5	116.4	197.6	255.8
50°	47.3	50.3	93.3	174.5	231.5
52.5°	41.8	43.0	72.7	151.5	207.3
55°	35.8	37.0	56.4	128.5	182.4
57.5°	30.3	30.9	45.5	106.7	155.8
60°	25.5	26.1	40.0	85.5	128.5
62.5°	21.2	21.8	35.8	66.1	102.4
65°	17.0	18.2	30.3	48.5	78.2
67.5°	13.9	16.4	25.5	33.9	54.5
70°	11.5	15.8	20.6	23.6	33.3
72.5°	9.7	14.5	17.6	17.0	16.4
75°	7.9	13.9	14.5	13.3	12.7
77.5°	6.7	12.1	12.1	10.9	10.3
80°	5.5	9.7	9.7	9.7	8.5
82.5°	4.8	7.9	8.5	8.5	6.7
85°	3.6	6.7	7.3	7.3	4.8
87.5°	2.4	6.1	6.7	6.1	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)