

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: P1056060

Luminaire Tested: S124R3DR-S575D950-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056060
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124R3DR-S575D950-X4F0-XX-UDD-FLL-W
Description: DEFINE 4, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

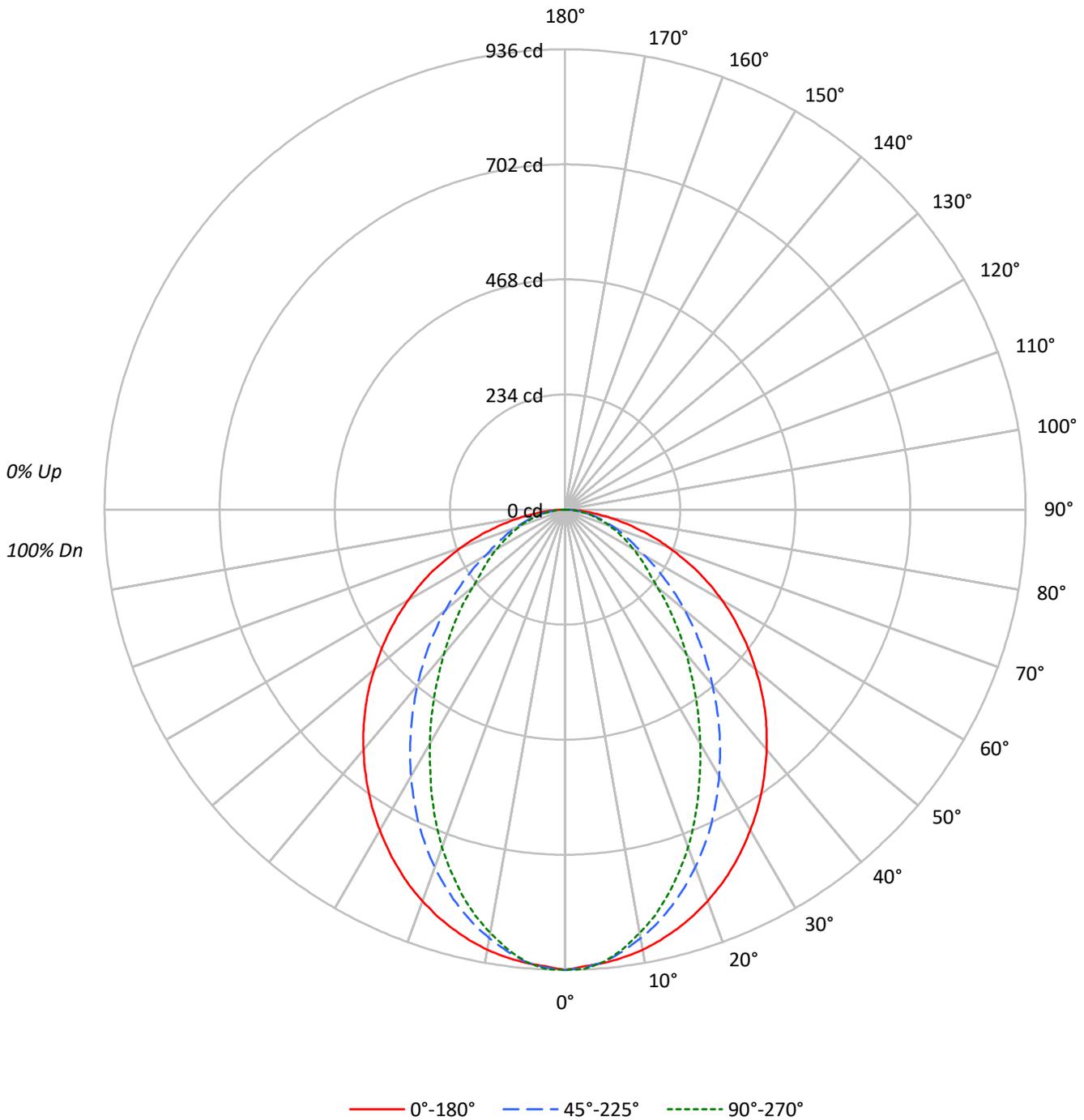
Lumens per Lamp: N/A
Luminaire Lumens: 1864.8 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.95 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 19.1
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	110	105	102	98	107	103	100	97	99	96	93	95	93	91	92	90	88	86																												
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	76	73																												
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63																												
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55																												
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49																												
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43																												
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39																												
8	64	51	43	38	62	51	43	38	49	42	37	48	42	37	47	41	37	35																												
9	60	47	39	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32																												
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8277	8277	8277
5°	8211	8194	8187
10°	8164	7948	7848
15°	8078	7649	7416
20°	7973	7286	6878
25°	7843	6869	6250
30°	7687	6393	5613
35°	7525	5896	4997
40°	7355	5383	4420
45°	7176	4884	3885
50°	6956	4359	3355
55°	6744	3834	3047
60°	6505	3289	2826
65°	6211	2983	2638
70°	5770	2761	2492
75°	5223	2542	2354
80°	4562	2352	2210
85°	3490	2171	2029

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7176 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.2	4.7
10°-20°	236.4	12.7
20°-30°	327.4	17.6
30°-40°	351.4	18.8
40°-50°	319.5	17.1
50°-60°	251.6	13.5
60°-70°	172.2	9.2
70°-80°	92.7	5.0
80°-90°	26.3	1.4
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°	651.0	34.9
0°-40°	1002.4	53.8
0°-60°	1573.6	84.4
0°-90°	1864.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1864.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	936	936	936	936	936	
5°	925	936	923	918	922	88
15°	882	873	836	813	810	249
25°	804	771	704	653	641	370
35°	697	643	546	480	463	436
45°	574	501	391	323	311	442
55°	438	354	249	200	198	391
65°	297	212	143	127	126	293
75°	153	93	74	68	69	163
85°	34	23	21	20	20	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	936.2	936.2	936.2	936.2	936.2
2.5°	929.4	940.4	932.1	933.5	934.9
5°	925.2	935.6	923.2	918.3	922.5
7.5°	918.3	925.2	905.9	897.0	901.1
10°	909.4	910.8	885.3	872.2	874.2
12.5°	897.0	893.5	862.5	843.9	845.3
15°	882.5	872.9	835.7	812.9	810.2
17.5°	866.0	850.1	806.0	777.1	771.6
20°	847.4	826.0	774.4	737.2	731.0
22.5°	826.7	799.2	739.9	695.8	686.9
25°	804.0	770.9	704.1	653.1	640.7
27.5°	779.2	740.6	665.5	609.7	593.9
30°	753.0	708.9	626.2	566.3	549.8
32.5°	726.1	676.5	586.3	522.9	505.7
35°	697.2	642.8	546.3	480.2	463.0
37.5°	667.6	607.6	505.7	438.8	420.9
40°	637.3	572.5	466.4	397.5	383.0
42.5°	606.3	536.7	427.8	358.9	345.8
45°	573.9	500.8	390.6	323.1	310.7
47.5°	540.8	464.3	352.7	289.3	277.6
50°	505.7	427.8	316.9	256.3	243.9
52.5°	471.9	390.6	282.5	223.9	217.7
55°	437.5	354.1	248.7	200.5	197.7
57.5°	403.0	317.6	217.7	181.9	179.1
60°	367.9	281.8	186.0	162.6	159.8
62.5°	332.8	246.6	162.6	144.0	142.6
65°	296.9	212.2	142.6	126.8	126.1
67.5°	259.0	179.1	124.7	111.6	110.9
70°	223.2	146.1	106.8	96.4	96.4
72.5°	189.5	115.7	90.2	82.0	82.0
75°	152.9	93.0	74.4	68.2	68.9
77.5°	120.6	73.0	59.9	55.8	55.8
80°	89.6	54.4	46.2	42.7	43.4
82.5°	60.6	37.9	33.1	31.0	31.0
85°	34.4	23.4	21.4	20.0	20.0
87.5°	12.4	11.0	10.3	9.0	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)