

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: P1056054

Luminaire Tested: S124R3DR-S575D935-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056054
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-S575D935-X4F0-XX-UDD-FLL-W
Description: DEFINE 4, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

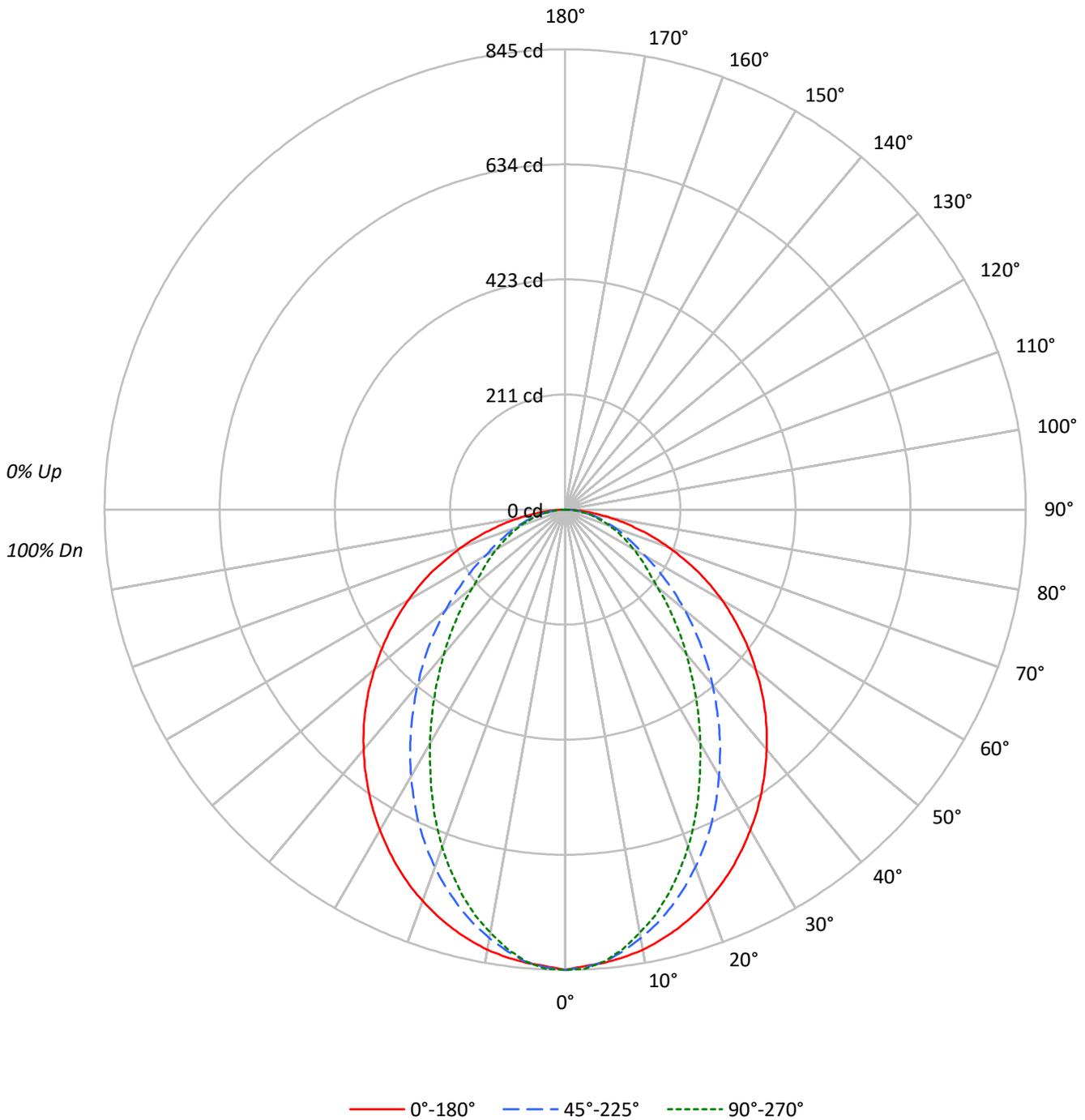
Lumens per Lamp: N/A
Luminaire Lumens: 1683.0 lumens
Efficiency: N/A
Efficacy: 88.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.95 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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				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	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°	7471	7471	7471
5°	7411	7395	7389
10°	7368	7173	7083
15°	7291	6903	6693
20°	7196	6576	6207
25°	7079	6199	5641
30°	6938	5770	5066
35°	6791	5322	4509
40°	6638	4858	3990
45°	6476	4408	3506
50°	6278	3934	3027
55°	6086	3461	2750
60°	5871	2969	2550
65°	5607	2692	2381
70°	5209	2492	2249
75°	4714	2296	2125
80°	4114	2123	1996
85°	3155	1958	1826

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6476 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.7	4.7
10°-20°	213.4	12.7
20°-30°	295.5	17.6
30°-40°	317.1	18.8
40°-50°	288.4	17.1
50°-60°	227.1	13.5
60°-70°	155.4	9.2
70°-80°	83.7	5.0
80°-90°	23.7	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°	587.5	34.9
0°-40°	904.7	53.8
0°-60°	1420.2	84.4
0°-90°	1683.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1683.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	845	845	845	845	845	
5°	835	844	833	829	832	79
15°	796	788	754	734	731	225
25°	726	696	635	589	578	334
35°	629	580	493	433	418	394
45°	518	452	352	292	280	399
55°	395	320	224	181	178	353
65°	268	192	129	114	114	264
75°	138	84	67	62	62	147
85°	31	21	19	18	18	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	845.0	845.0	845.0	845.0	845.0
2.5°	838.8	848.7	841.2	842.5	843.7
5°	835.0	844.4	833.2	828.8	832.5
7.5°	828.8	835.0	817.6	809.5	813.3
10°	820.7	822.0	799.0	787.2	789.0
12.5°	809.5	806.4	778.4	761.7	762.9
15°	796.5	787.8	754.2	733.7	731.2
17.5°	781.6	767.3	727.5	701.4	696.4
20°	764.8	745.5	698.9	665.3	659.7
22.5°	746.1	721.2	667.8	628.0	619.9
25°	725.6	695.8	635.4	589.4	578.2
27.5°	703.2	668.4	600.6	550.3	536.0
30°	679.6	639.8	565.2	511.1	496.2
32.5°	655.3	610.6	529.1	471.9	456.4
35°	629.2	580.1	493.1	433.4	417.8
37.5°	602.5	548.4	456.4	396.1	379.9
40°	575.1	516.7	420.9	358.8	345.7
42.5°	547.2	484.4	386.1	323.9	312.1
45°	517.9	452.0	352.5	291.6	280.4
47.5°	488.1	419.1	318.3	261.1	250.6
50°	456.4	386.1	286.0	231.3	220.1
52.5°	425.9	352.5	254.9	202.1	196.5
55°	394.8	319.6	224.5	180.9	178.4
57.5°	363.7	286.6	196.5	164.1	161.7
60°	332.0	254.3	167.9	146.7	144.2
62.5°	300.3	222.6	146.7	129.9	128.7
65°	268.0	191.5	128.7	114.4	113.8
67.5°	233.8	161.7	112.5	100.7	100.1
70°	201.5	131.8	96.4	87.0	87.0
72.5°	171.0	104.5	81.5	74.0	74.0
75°	138.0	83.9	67.2	61.6	62.2
77.5°	108.8	65.9	54.1	50.4	50.4
80°	80.8	49.1	41.7	38.5	39.2
82.5°	54.7	34.2	29.8	28.0	28.0
85°	31.1	21.1	19.3	18.0	18.0
87.5°	11.2	9.9	9.3	8.1	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)