

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: P1056058

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056058
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-8)
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-B
Description: DEFINE 4, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

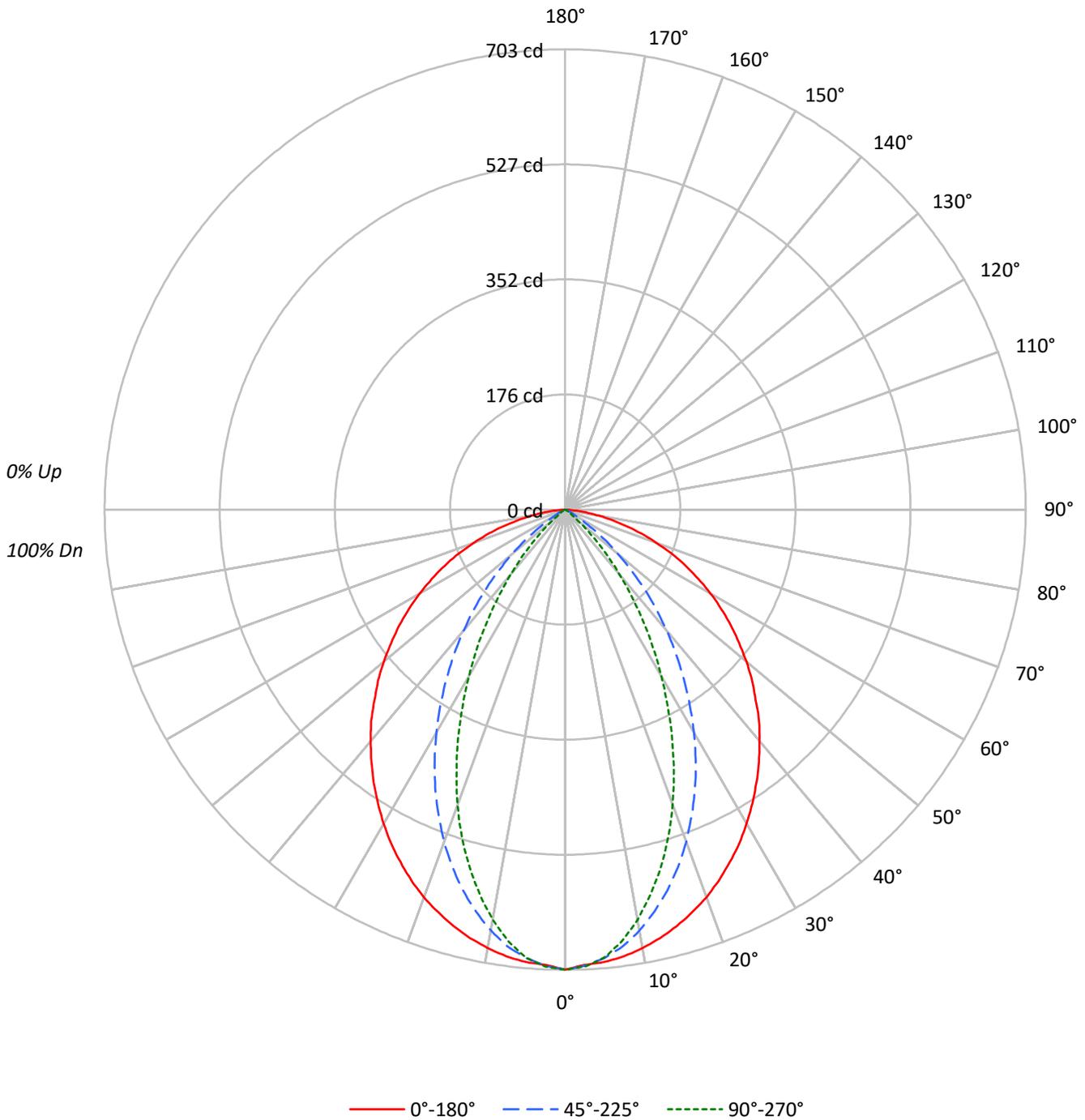
Lumens per Lamp: N/A
Luminaire Lumens: 982.1 lumens
Efficiency: N/A
Efficacy: 51.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64
5	84	74	66	61	83	73	66	61	71	65	60	69	64	60	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	54	52
7	74	63	55	50	73	62	55	50	60	54	50	59	53	49	58	53	49	47
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43
9	66	54	47	42	64	53	47	42	52	46	42	51	46	42	50	45	41	40
10	62	50	43	39	61	50	43	39	49	43	39	48	42	39	47	42	38	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6213	6213	6213
5°	6157	6102	6096
10°	6105	5863	5709
15°	6028	5511	5171
20°	5931	5082	4518
25°	5800	4577	3770
30°	5655	4016	2996
35°	5495	3405	2231
40°	5328	2775	1487
45°	5143	2119	818
50°	4965	1450	227
55°	4768	786	148
60°	4532	244	85
65°	4236	159	44
70°	3828	72	18
75°	3293	24	0
80°	2490	0	0
85°	1045	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5143 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.8	6.6
10°-20°	170.2	17.3
20°-30°	219.9	22.4
30°-40°	210.2	21.4
40°-50°	157.2	16.0
50°-60°	93.6	9.5
60°-70°	47.5	4.8
70°-80°	16.5	1.7
80°-90°	2.3	0.2
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°	454.9	46.3
0°-40°	665.1	67.7
0°-60°	915.9	93.3
0°-90°	982.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	982.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	703	703	703	703	703	
5°	694	699	688	684	687	66
15°	659	645	602	574	565	186
25°	594	553	469	407	386	274
35°	509	439	316	235	207	318
45°	411	316	170	90	65	318
55°	309	192	51	12	10	276
65°	202	78	8	3	2	200
75°	96	10	1	1	0	102
85°	10	0	0	0	0	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	702.7	702.7	702.7	702.7	702.7
2.5°	695.8	704.1	697.2	697.9	698.6
5°	693.7	699.3	687.5	684.1	686.9
7.5°	688.2	690.3	673.1	664.1	664.8
10°	680.0	677.9	653.1	637.9	635.9
12.5°	670.3	663.4	629.0	606.9	602.1
15°	658.6	644.8	602.1	573.9	564.9
17.5°	644.8	624.9	572.5	535.3	524.3
20°	630.4	602.8	540.1	494.0	480.2
22.5°	613.1	578.0	505.0	450.6	433.3
25°	594.5	553.2	469.2	407.2	386.5
27.5°	575.3	526.3	431.3	363.1	339.0
30°	553.9	498.1	393.4	318.3	293.5
32.5°	531.8	469.2	354.1	276.9	249.4
35°	509.1	438.8	315.5	234.9	206.7
37.5°	485.7	408.5	278.3	195.0	166.0
40°	461.6	377.5	240.4	157.1	128.8
42.5°	438.2	346.5	204.6	121.3	95.1
45°	411.3	315.5	169.5	90.2	65.4
47.5°	387.2	285.2	135.7	61.3	38.6
50°	361.0	252.8	105.4	35.8	16.5
52.5°	334.8	222.5	77.2	15.8	12.4
55°	309.3	192.2	51.0	11.7	9.6
57.5°	282.5	161.9	27.6	9.0	6.9
60°	256.3	132.3	13.8	6.9	4.8
62.5°	229.4	104.0	11.0	4.1	2.8
65°	202.5	77.8	7.6	2.8	2.1
67.5°	175.7	53.0	4.8	1.4	0.7
70°	148.1	32.4	2.8	0.7	0.7
72.5°	121.9	16.5	1.4	0.7	0.7
75°	96.4	10.3	0.7	0.7	0.0
77.5°	71.6	5.5	0.7	0.7	0.0
80°	48.9	2.1	0.0	0.0	0.0
82.5°	28.2	0.7	0.0	0.0	0.0
85°	10.3	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)