

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: P1056059

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056059
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-9)
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-S
Description: DEFINE 4, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

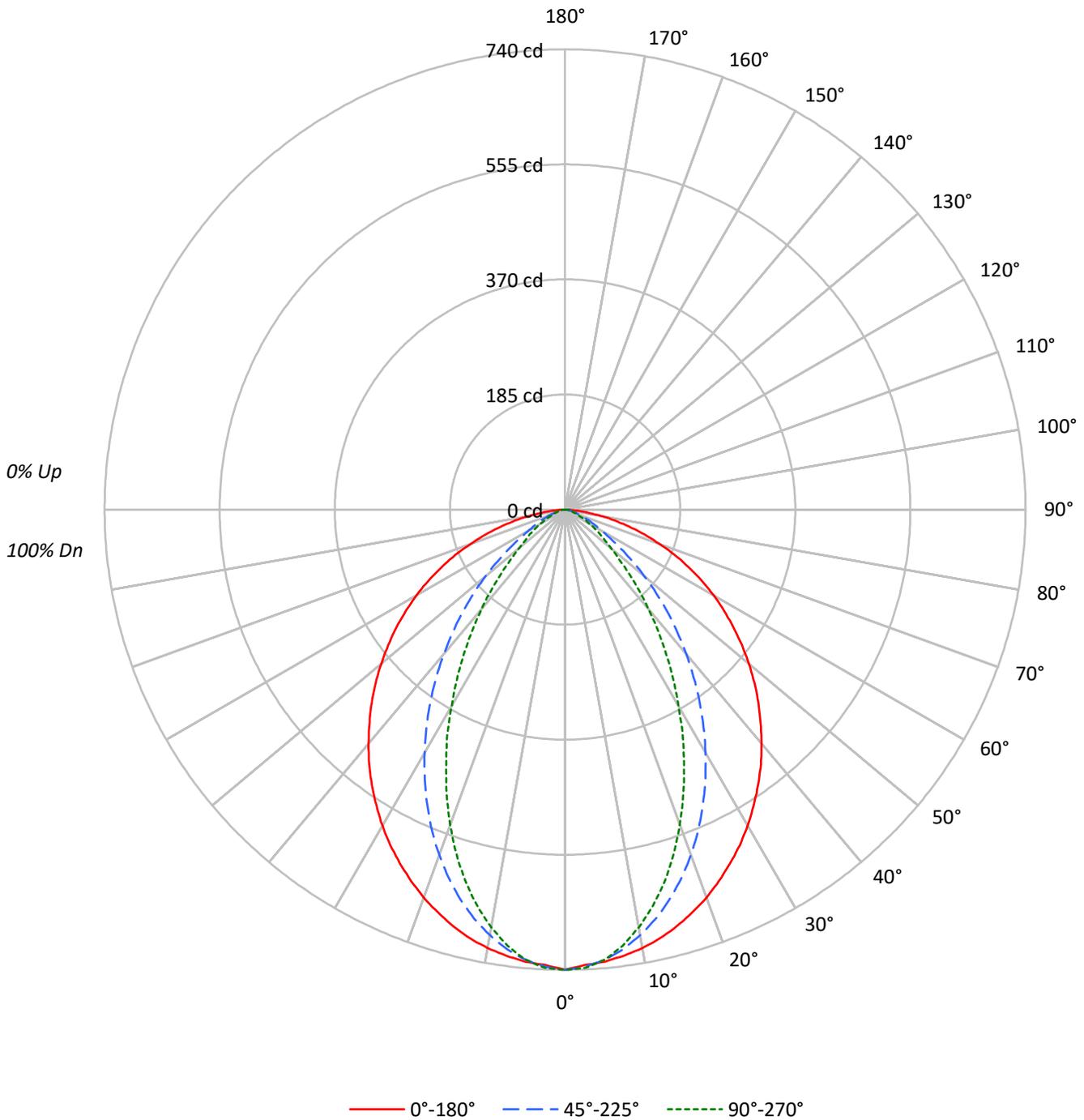
Lumens per Lamp: N/A
Luminaire Lumens: 1196.4 lumens
Efficiency: N/A
Efficacy: 62.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.87 / 1.03
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	71	66	62	60
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	48
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37
10	60	48	41	36	59	47	40	36	46	40	36	45	40	35	45	39	35	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6542	6542	6542
5°	6475	6450	6450
10°	6426	6240	6123
15°	6350	5940	5663
20°	6248	5562	5075
25°	6122	5115	4408
30°	5993	4606	3714
35°	5837	4067	3056
40°	5669	3490	2409
45°	5495	2903	1801
50°	5307	2283	1318
55°	5098	1688	1051
60°	4873	1169	805
65°	4584	908	590
70°	4149	641	463
75°	3624	448	352
80°	2912	351	316
85°	1603	284	284

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5495 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.6	5.7
10°-20°	183.4	15.3
20°-30°	244.6	20.4
30°-40°	246.3	20.6
40°-50°	202.0	16.9
50°-60°	138.0	11.5
60°-70°	77.1	6.4
70°-80°	30.6	2.6
80°-90°	5.8	0.5
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°	496.6	41.5
0°-40°	742.8	62.1
0°-60°	1082.8	90.5
0°-90°	1196.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1196.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	740	740	740	740	740	
5°	730	738	727	723	727	69
15°	694	686	649	626	619	195
25°	628	597	524	471	452	289
35°	541	484	377	305	283	338
45°	440	359	232	163	144	339
55°	331	232	110	73	68	296
65°	219	110	43	31	28	216
75°	106	29	13	11	10	114
85°	16	3	3	3	3	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	739.9	739.9	739.9	739.9	739.9
2.5°	733.0	742.0	735.8	736.5	737.8
5°	729.6	737.8	726.8	723.4	726.8
7.5°	723.4	729.6	713.0	706.1	707.5
10°	715.8	717.9	695.1	683.4	682.0
12.5°	706.1	703.4	673.8	656.5	652.4
15°	693.7	686.2	649.0	626.2	618.7
17.5°	679.3	666.2	621.4	591.8	580.8
20°	664.1	644.8	591.1	553.2	539.4
22.5°	646.2	622.1	558.7	512.6	496.7
25°	627.6	596.6	524.3	471.2	451.9
27.5°	608.3	570.4	488.4	429.2	409.9
30°	587.0	542.2	451.2	387.2	363.8
32.5°	564.2	513.2	414.0	345.8	323.8
35°	540.8	483.6	376.8	305.2	283.1
37.5°	516.7	453.3	339.6	266.6	244.6
40°	491.2	422.3	302.4	230.1	208.7
42.5°	465.0	390.6	266.6	195.7	175.7
45°	439.5	358.9	232.2	163.3	144.0
47.5°	412.7	327.2	198.4	133.0	116.4
50°	385.8	295.5	166.0	106.8	95.8
52.5°	358.2	263.9	136.4	87.5	79.9
55°	330.7	232.2	109.5	73.0	68.2
57.5°	303.1	200.5	84.7	62.0	56.5
60°	275.6	169.5	66.1	50.3	45.5
62.5°	247.3	138.5	54.4	40.0	35.8
65°	219.1	110.2	43.4	31.0	28.2
67.5°	190.8	84.0	33.1	24.1	22.0
70°	160.5	59.9	24.8	18.6	17.9
72.5°	134.3	40.6	17.9	14.5	13.8
75°	106.1	28.9	13.1	11.0	10.3
77.5°	82.0	18.6	9.6	9.0	8.3
80°	57.2	10.3	6.9	6.2	6.2
82.5°	35.1	5.5	4.8	4.1	4.1
85°	15.8	2.8	2.8	2.8	2.8
87.5°	2.8	1.4	1.4	1.4	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)