

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: P1056056

Luminaire Tested: S124R3DR-S575D940-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056056
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-S575D940-X4F0-XX-UDD-FLL-S
Description: DEFINE 4, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

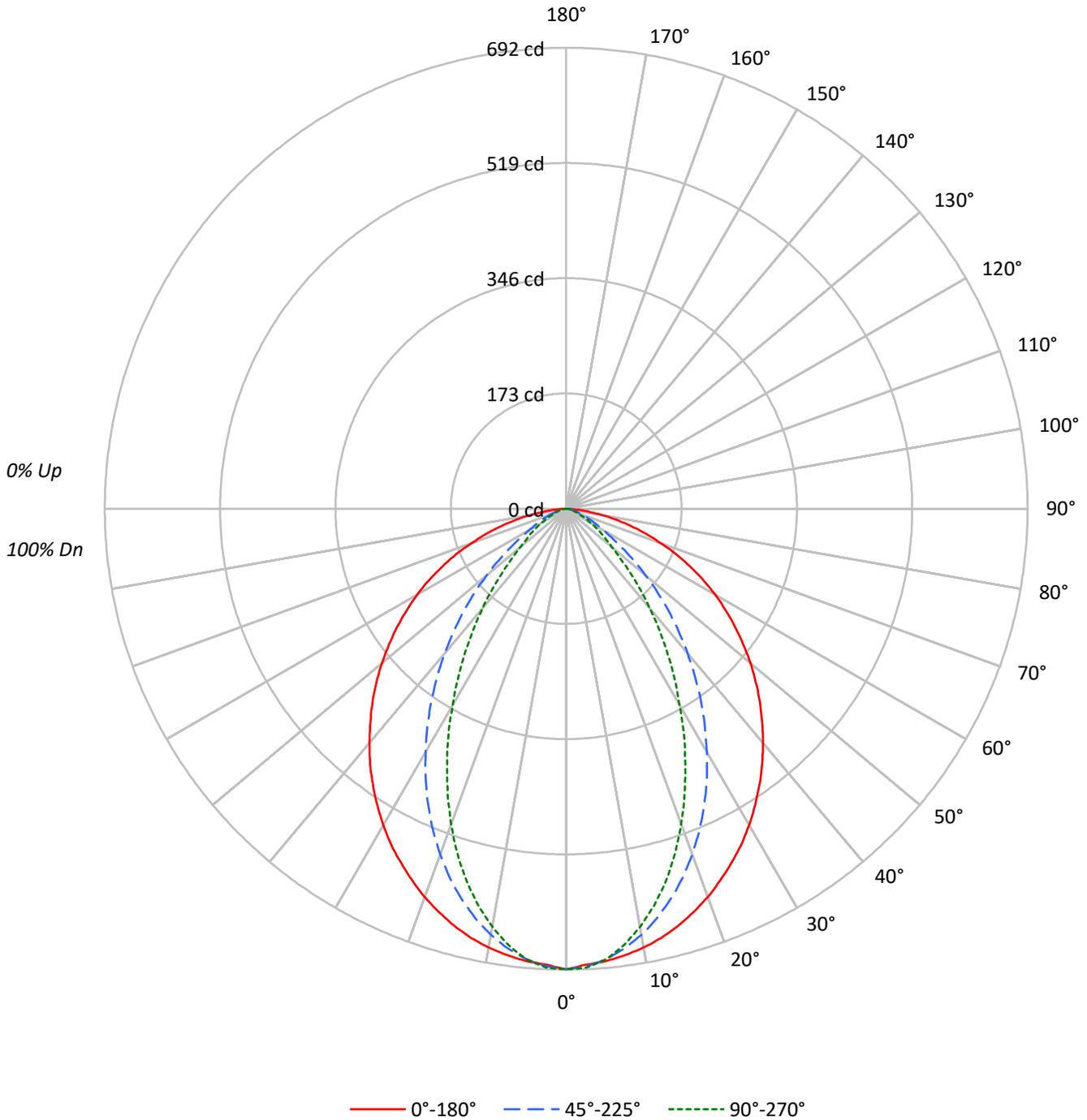
Lumens per Lamp: N/A
Luminaire Lumens: 1118.3 lumens
Efficiency: N/A
Efficacy: 58.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.87 / 1.03
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6115	6115	6115
5°	6052	6030	6030
10°	6007	5833	5723
15°	5936	5552	5293
20°	5841	5198	4744
25°	5723	4780	4121
30°	5601	4306	3471
35°	5456	3801	2857
40°	5299	3263	2252
45°	5136	2713	1683
50°	4960	2135	1231
55°	4765	1578	983
60°	4555	1093	752
65°	4285	849	552
70°	3878	600	432
75°	3389	417	331
80°	2719	326	295
85°	1501	264	264

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5136 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.1	5.7
10°-20°	171.4	15.3
20°-30°	228.6	20.4
30°-40°	230.2	20.6
40°-50°	188.8	16.9
50°-60°	129.0	11.5
60°-70°	72.1	6.4
70°-80°	28.6	2.6
80°-90°	5.4	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°	464.2	41.5
0°-40°	694.4	62.1
0°-60°	1012.2	90.5
0°-90°	1118.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1118.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	692	692	692	692	692	
5°	682	690	679	676	679	65
15°	648	641	607	585	578	183
25°	587	558	490	440	422	270
35°	506	452	352	285	265	316
45°	411	336	217	153	135	317
55°	309	217	102	68	64	276
65°	205	103	41	29	26	202
75°	99	27	12	10	10	106
85°	15	3	3	3	3	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	691.6	691.6	691.6	691.6	691.6
2.5°	685.2	693.5	687.7	688.4	689.7
5°	681.9	689.7	679.4	676.1	679.4
7.5°	676.1	681.9	666.5	660.0	661.3
10°	669.1	671.0	649.7	638.8	637.5
12.5°	660.0	657.5	629.8	613.7	609.8
15°	648.5	641.4	606.6	585.3	578.3
17.5°	634.9	622.7	580.8	553.1	542.8
20°	620.8	602.7	552.5	517.1	504.2
22.5°	604.0	581.5	522.2	479.1	464.3
25°	586.6	557.7	490.0	440.5	422.4
27.5°	568.6	533.2	456.6	401.2	383.1
30°	548.6	506.8	421.8	361.9	340.0
32.5°	527.4	479.7	387.0	323.3	302.7
35°	505.5	452.0	352.2	285.3	264.7
37.5°	483.0	423.7	317.5	249.2	228.6
40°	459.1	394.7	282.7	215.1	195.1
42.5°	434.7	365.1	249.2	182.9	164.2
45°	410.8	335.5	217.0	152.6	134.6
47.5°	385.7	305.9	185.5	124.3	108.8
50°	360.6	276.3	155.2	99.8	89.5
52.5°	334.9	246.6	127.5	81.8	74.7
55°	309.1	217.0	102.4	68.3	63.8
57.5°	283.3	187.4	79.2	58.0	52.8
60°	257.6	158.4	61.8	47.0	42.5
62.5°	231.2	129.4	50.9	37.3	33.5
65°	204.8	103.0	40.6	29.0	26.4
67.5°	178.4	78.6	30.9	22.5	20.6
70°	150.0	56.0	23.2	17.4	16.7
72.5°	125.6	38.0	16.7	13.5	12.9
75°	99.2	27.0	12.2	10.3	9.7
77.5°	76.6	17.4	9.0	8.4	7.7
80°	53.4	9.7	6.4	5.8	5.8
82.5°	32.8	5.2	4.5	3.9	3.9
85°	14.8	2.6	2.6	2.6	2.6
87.5°	2.6	1.3	1.3	1.3	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)