

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: P1055669

Luminaire Tested: S123R3DR-S775D927-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055669
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-6)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123R3DR-S775D927-X4F0-XX-UDD-FLL-S
Description: DEFINE 3, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

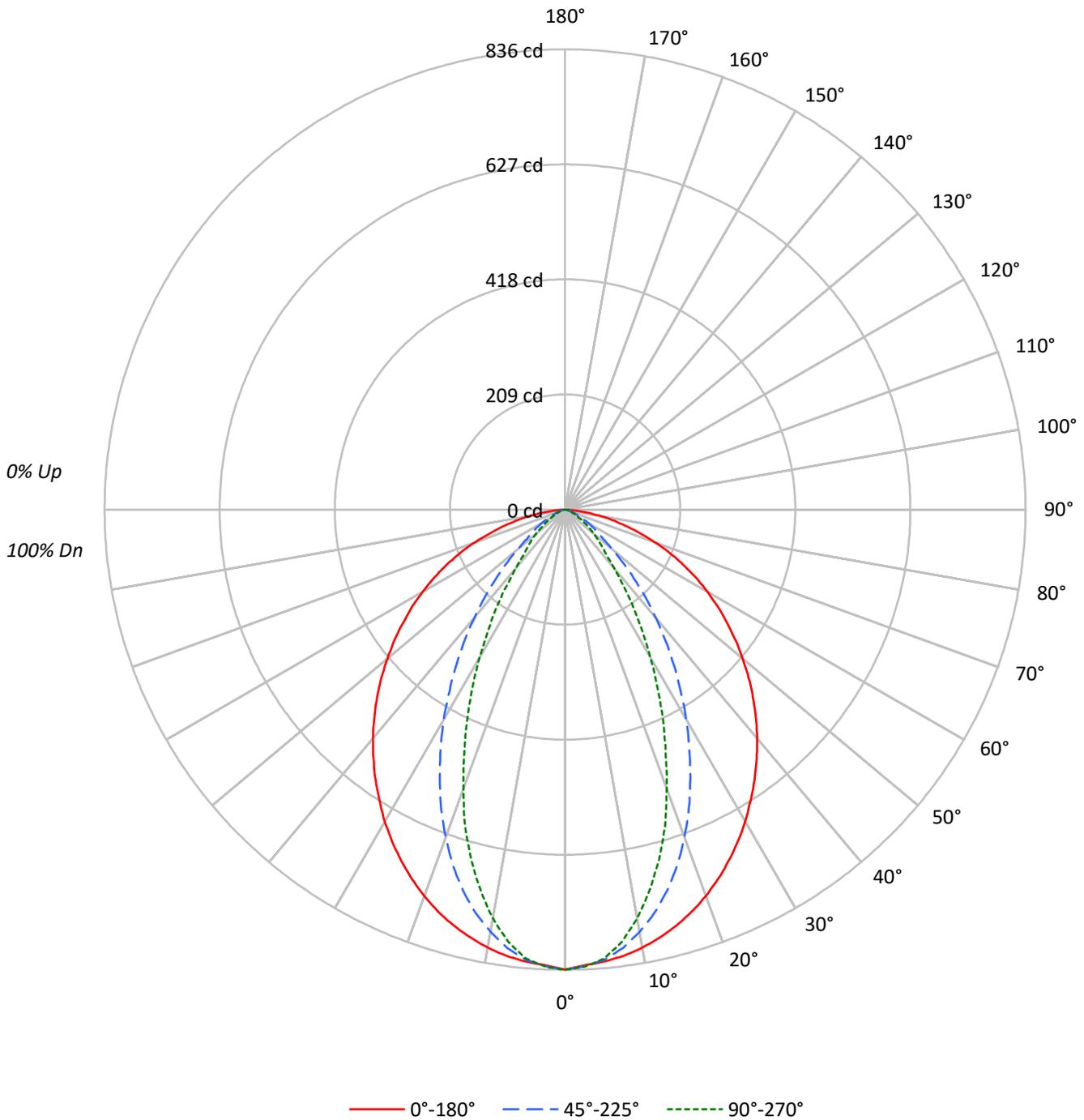
Lumens per Lamp: N/A
Luminaire Lumens: 1162.3 lumens
Efficiency: N/A
Efficacy: 44.0 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.77 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
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	0														
RCR																																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																				
1	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89																				
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79																				
3	96	88	81	76	94	86	80	76	84	78	74	81	77	73	79	75	72	70																				
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62																				
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56																				
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51																				
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46																				
8	69	57	50	45	68	57	50	45	56	49	45	54	49	44	53	48	44	42																				
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39																				
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10076	10076	10076
5°	9971	9932	9903
10°	9892	9533	9233
15°	9759	8938	8217
20°	9584	8130	6922
25°	9358	7156	5586
30°	9109	6132	4302
35°	8826	5060	3184
40°	8540	4027	2169
45°	8225	3013	1635
50°	7889	2095	1277
55°	7544	1532	933
60°	7183	1145	668
65°	6758	767	519
70°	6116	557	419
75°	5278	405	331
80°	4235	333	278
85°	2186	332	221

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8225 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.3	6.6
10°-20°	201.1	17.3
20°-30°	252.7	21.7
30°-40°	235.3	20.2
40°-50°	180.1	15.5
50°-60°	119.7	10.3
60°-70°	64.5	5.6
70°-80°	26.4	2.3
80°-90°	5.1	0.4
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°	531.0	45.7
0°-40°	766.3	65.9
0°-60°	1066.2	91.7
0°-90°	1162.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1162.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	836	836	836	836	836	
5°	824	833	821	818	818	78
15°	782	769	716	674	658	220
25°	704	656	538	448	420	324
35°	600	511	344	243	216	375
45°	482	356	177	104	96	372
55°	359	208	73	51	44	322
65°	237	80	27	20	18	234
75°	113	19	9	8	7	121
85°	16	2	2	2	2	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	835.7	835.7	835.7	835.7	835.7
2.5°	828.6	838.9	830.2	831.0	831.0
5°	823.9	832.6	820.7	817.5	818.3
7.5°	817.5	823.1	803.3	793.0	791.4
10°	808.0	809.6	778.7	760.5	754.2
12.5°	796.1	790.6	750.2	720.1	708.2
15°	781.9	769.2	716.1	674.1	658.3
17.5°	766.0	744.6	677.3	622.7	603.6
20°	747.0	716.9	633.7	565.6	539.5
22.5°	726.4	687.6	587.8	507.0	477.7
25°	703.5	655.9	537.9	448.4	419.9
27.5°	679.7	621.9	488.8	392.9	363.6
30°	654.3	587.0	440.5	339.1	309.0
32.5°	626.6	549.0	390.5	289.1	259.0
35°	599.7	511.0	343.8	243.2	216.3
37.5°	571.2	472.9	298.7	202.8	172.7
40°	542.6	434.1	255.9	163.2	137.8
42.5°	512.5	395.3	215.5	129.9	110.1
45°	482.4	356.5	176.7	103.8	95.9
47.5°	452.3	317.7	142.6	89.5	81.6
50°	420.6	280.4	111.7	76.0	68.1
52.5°	390.5	243.2	87.1	62.6	55.5
55°	358.9	207.6	72.9	50.7	44.4
57.5°	329.5	171.1	60.2	39.6	34.9
60°	297.9	138.6	47.5	30.9	27.7
62.5°	267.8	108.5	36.4	24.6	22.2
65°	236.9	80.0	26.9	19.8	18.2
67.5°	206.0	57.8	20.6	15.8	15.1
70°	173.5	43.6	15.8	12.7	11.9
72.5°	142.6	30.9	11.9	10.3	9.5
75°	113.3	19.0	8.7	7.9	7.1
77.5°	87.1	11.1	6.3	6.3	5.5
80°	61.0	6.3	4.8	4.8	4.0
82.5°	37.2	4.0	3.2	3.2	3.2
85°	15.8	2.4	2.4	2.4	1.6
87.5°	2.4	0.8	0.8	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)