

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: P1055668

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055668
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-5)
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-B
Description: DEFINE 3, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

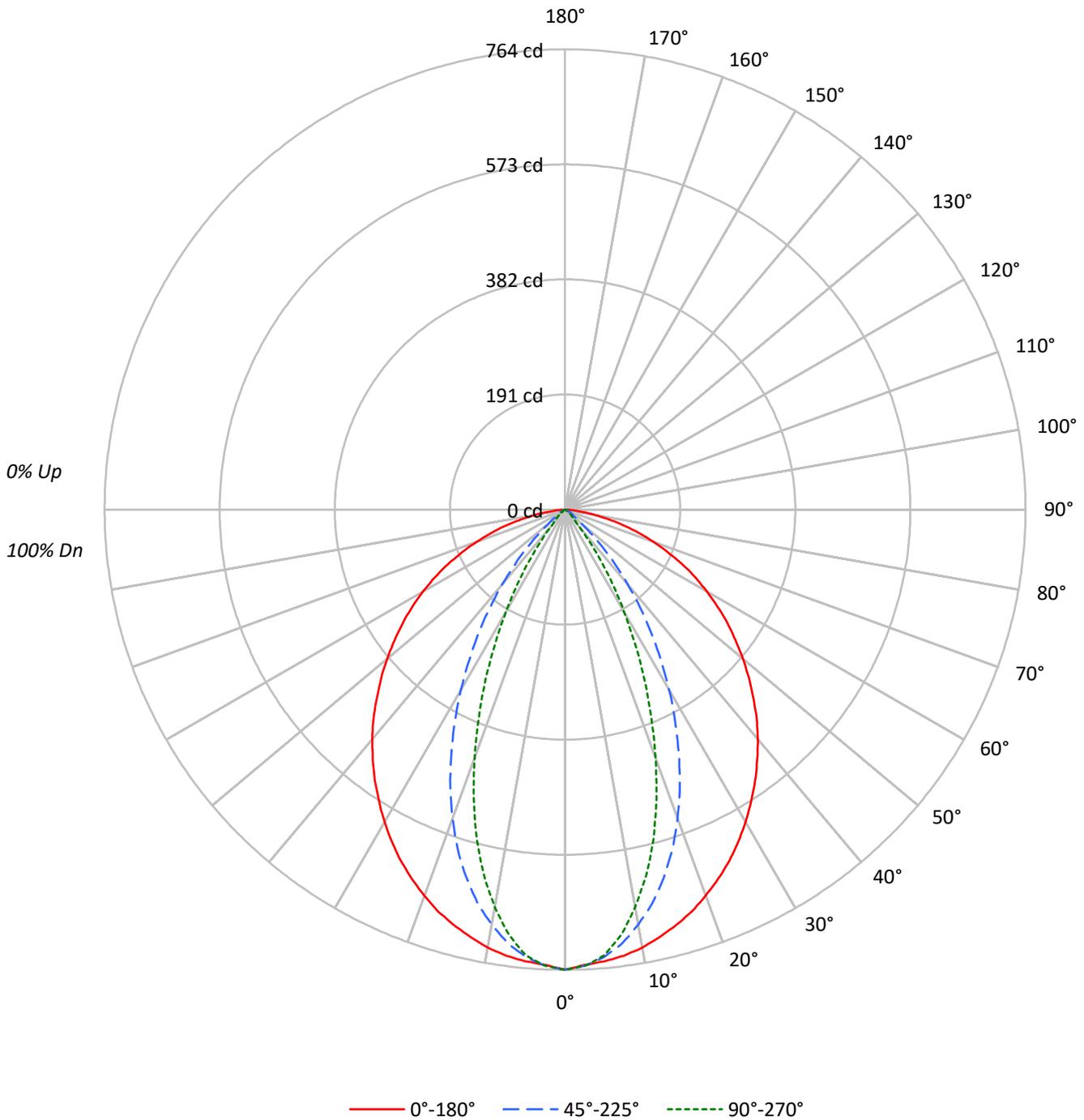
Lumens per Lamp: N/A
Luminaire Lumens: 893.8 lumens
Efficiency: N/A
Efficacy: 33.9 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.7 / 0.86
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

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					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				
1	112	108	105	103	109	106	104	101	102	100	98	98	97	95	95	93	92	90				
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81				
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73				
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65				
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59				
6	81	70	63	57	79	69	62	57	67	61	57	66	61	56	64	60	56	54				
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50				
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46				
9	68	56	49	45	66	56	49	45	55	49	45	54	48	44	53	48	44	43				
10	64	53	46	42	63	52	46	42	51	46	41	51	45	41	50	45	41	40				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9207	9207	9207
5°	9108	9021	8993
10°	9039	8564	8205
15°	8909	7891	7070
20°	8751	7003	5631
25°	8567	5933	4152
30°	8338	4808	2724
35°	8092	3660	1492
40°	7830	2531	512
45°	7523	1471	297
50°	7221	580	178
55°	6911	366	84
60°	6551	229	39
65°	6102	114	23
70°	5474	56	28
75°	4649	37	37
80°	3465	56	0
85°	1314	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7523 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.0	7.8
10°-20°	177.7	19.9
20°-30°	211.9	23.7
30°-40°	179.8	20.1
40°-50°	122.2	13.7
50°-60°	75.7	8.5
60°-70°	38.4	4.3
70°-80°	15.6	1.8
80°-90°	2.4	0.3
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°	459.7	51.4
0°-40°	639.4	71.5
0°-60°	837.4	93.7
0°-90°	893.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	893.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	764	764	764	764	764	
5°	753	760	745	740	743	71
15°	714	696	632	582	566	201
25°	644	584	446	345	312	296
35°	550	441	249	134	101	344
45°	441	289	86	21	17	341
55°	329	146	17	6	4	294
65°	214	36	4	1	1	211
75°	100	6	1	1	1	106
85°	10	0	0	1	0	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	763.7	763.7	763.7	763.7	763.7
2.5°	756.5	766.8	758.1	757.3	758.1
5°	752.6	759.7	745.4	739.9	743.1
7.5°	747.0	750.2	726.4	712.2	712.2
10°	738.3	735.9	699.5	675.7	670.2
12.5°	726.4	716.9	669.4	632.2	621.9
15°	713.8	695.5	632.2	582.3	566.4
17.5°	699.5	671.8	591.8	526.8	503.8
20°	682.1	644.8	545.8	466.6	438.9
22.5°	663.8	615.5	497.5	404.8	373.9
25°	644.0	583.8	446.0	344.6	312.1
27.5°	621.9	550.6	395.3	286.8	251.1
30°	598.9	515.7	345.4	231.3	195.7
32.5°	574.3	479.3	295.5	180.6	147.3
35°	549.8	441.2	248.7	133.9	101.4
37.5°	523.6	403.2	203.6	92.7	64.2
40°	497.5	366.0	160.8	58.6	32.5
42.5°	470.6	327.2	122.0	29.3	22.2
45°	441.2	289.1	86.3	21.4	17.4
47.5°	413.5	252.7	57.0	17.4	13.5
50°	385.0	216.3	30.9	12.7	9.5
52.5°	356.5	181.4	22.2	9.5	6.3
55°	328.8	145.8	17.4	6.3	4.0
57.5°	300.2	114.9	13.5	4.0	2.4
60°	271.7	84.8	9.5	2.4	1.6
62.5°	243.2	58.6	6.3	1.6	0.8
65°	213.9	35.6	4.0	0.8	0.8
67.5°	183.8	24.6	2.4	0.8	0.8
70°	155.3	17.4	1.6	0.8	0.8
72.5°	126.7	11.1	0.8	0.8	0.0
75°	99.8	6.3	0.8	0.8	0.8
77.5°	73.7	2.4	0.8	0.8	0.0
80°	49.9	0.8	0.8	0.8	0.0
82.5°	27.7	0.0	0.8	0.8	0.0
85°	9.5	0.0	0.0	0.8	0.0
87.5°	0.0	0.0	0.0	0.8	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)