

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: P1059370

Luminaire Tested: S123RDR-S775D927-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059370
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-28)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S775D927-X4F0-XX-UDD-WVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

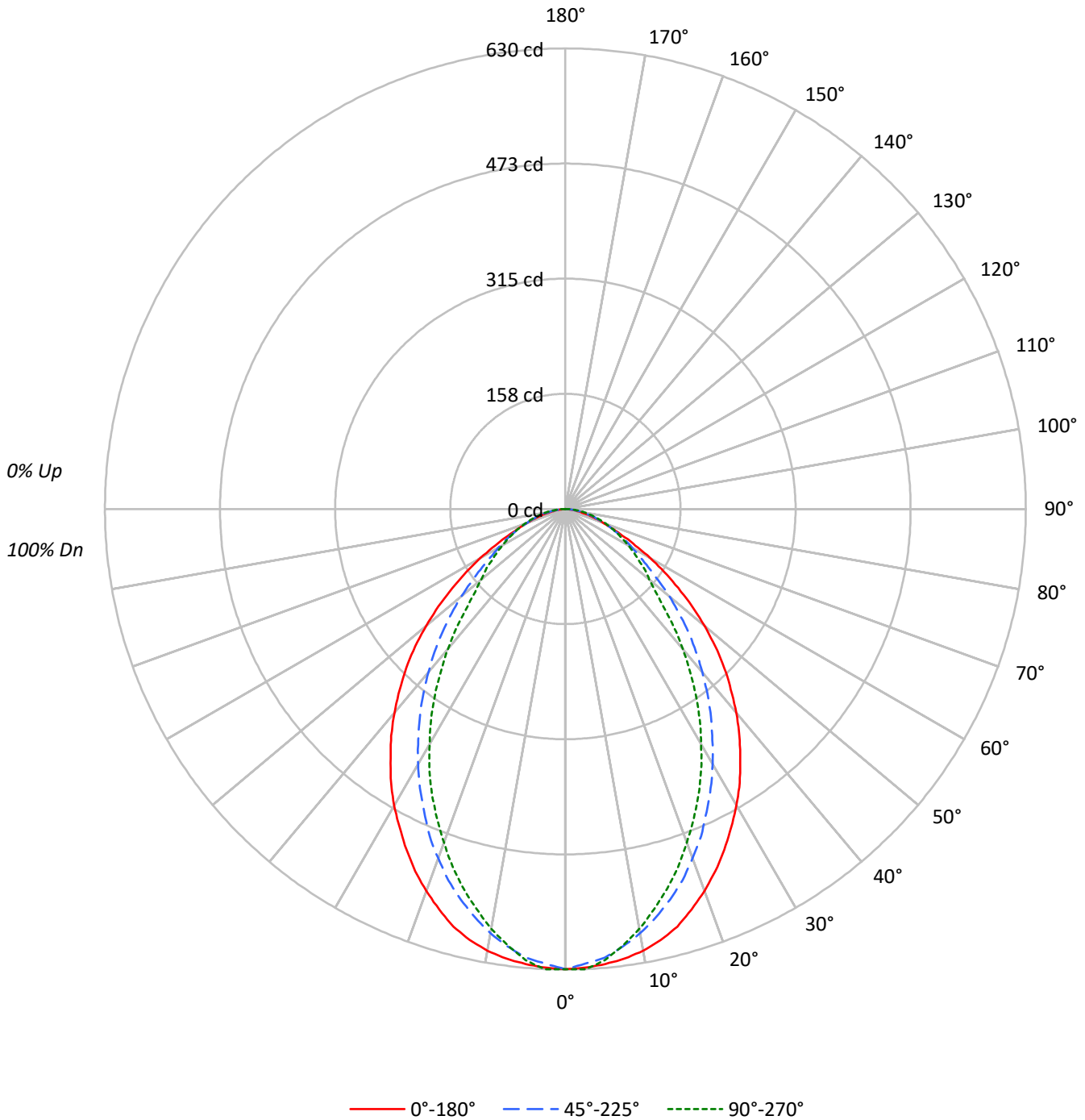
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1101.0 lumens
Efficiency: N/A
Efficacy: 42.7 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	88
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7392	7392	7392
5°	7366	7260	7303
10°	7316	7028	6955
15°	7192	6724	6539
20°	6949	6353	6069
25°	6666	5921	5588
30°	6350	5468	5037
35°	5976	4978	4458
40°	5578	4465	3838
45°	5113	3946	3154
50°	4534	3387	2737
55°	3857	2835	2510
60°	3145	2471	2327
65°	2398	2187	2164
70°	1871	1947	2026
75°	1511	1751	1887
80°	1123	1434	1738
85°	606	916	1522

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5113 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.4	5.3
10°-20°	157.2	14.3
20°-30°	213.7	19.4
30°-40°	221.6	20.1
40°-50°	186.9	17.0
50°-60°	132.6	12.0
60°-70°	81.1	7.4
70°-80°	40.3	3.7
80°-90°	9.1	0.8
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°	429.4	39.0
0°-40°	650.9	59.1
0°-60°	970.4	88.1
0°-90°	1101.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1101.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	630	630	630	630	630	
5°	625	625	616	620	620	59
15°	592	580	553	543	538	166
25°	514	492	457	440	431	236
35°	417	385	347	323	311	261
45°	308	275	238	205	190	236
55°	188	169	138	126	123	169
65°	86	83	79	79	78	88
75°	33	36	39	40	42	36
85°	4	5	7	10	11	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	629.5	629.5	629.5	629.5	629.5
2.5°	628.0	628.7	622.7	629.5	630.2
5°	624.9	624.9	615.9	619.6	619.6
7.5°	620.4	618.9	603.8	603.8	602.2
10°	613.6	609.0	589.4	585.6	583.3
12.5°	603.8	596.2	572.0	565.2	560.6
15°	591.6	580.3	553.1	543.2	537.9
17.5°	574.2	562.9	532.6	519.0	513.0
20°	556.1	539.4	508.4	494.8	485.7
22.5°	536.4	515.2	485.0	468.3	458.5
25°	514.5	491.8	457.0	440.3	431.3
27.5°	491.0	466.1	430.5	411.6	402.5
30°	468.3	439.6	403.3	382.1	371.5
32.5°	444.1	411.6	374.5	352.6	342.0
35°	416.9	385.1	347.3	323.1	311.0
37.5°	391.2	358.6	319.3	293.6	279.9
40°	363.9	331.4	291.3	264.8	250.4
42.5°	335.2	304.1	264.8	233.8	220.2
45°	307.9	275.4	237.6	205.0	189.9
47.5°	278.4	248.2	211.1	177.8	167.2
50°	248.2	220.2	185.4	155.1	149.8
52.5°	218.7	195.2	159.6	140.0	137.7
55°	188.4	168.7	138.5	126.3	122.6
57.5°	160.4	146.0	118.8	112.7	111.2
60°	133.9	121.8	105.2	101.4	99.1
62.5°	108.2	101.4	91.5	90.0	88.5
65°	86.3	83.2	78.7	78.7	77.9
67.5°	68.1	68.1	67.3	68.8	68.1
70°	54.5	55.2	56.7	58.3	59.0
72.5°	43.1	45.4	46.9	49.2	49.9
75°	33.3	35.6	38.6	40.1	41.6
77.5°	24.2	26.5	29.5	31.8	33.3
80°	16.6	18.2	21.2	24.2	25.7
82.5°	10.6	11.3	13.6	16.6	18.2
85°	4.5	5.3	6.8	9.8	11.3
87.5°	0.0	0.0	0.8	3.0	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)