

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: P1059366

Luminaire Tested: S123RDR-S775D927-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059366
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-66)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S775D927-X4F0-XX-UDD-BVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

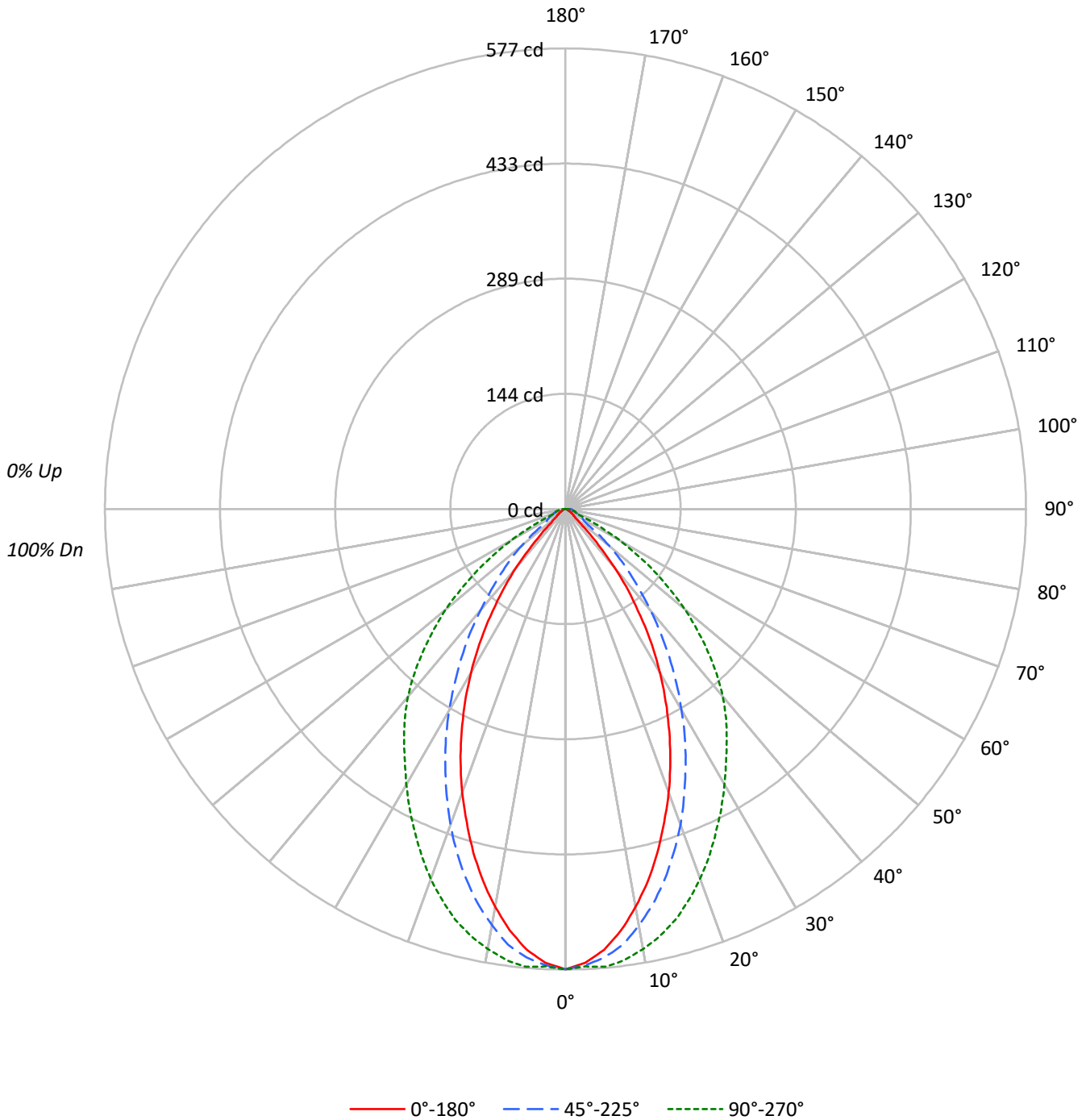
Lumens per Lamp: N/A
Luminaire Lumens: 692.4 lumens
Efficiency: N/A
Efficacy: 26.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1059366

CATALOG NUMBER: S123RDR-S775D927-X4F0-XX-UDD-BVL-W

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	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	99	94	90	102	97	92	88	94	90	87	91	87	85	88	85	83	81				
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73				
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66				
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55				
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	50				
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47				
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43				
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	42	40				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6772	6772	6772
5°	6538	6646	6788
10°	6036	6316	6677
15°	5417	5840	6476
20°	4725	5265	6164
25°	3987	4614	5782
30°	3205	3946	5405
35°	2347	3248	5052
40°	1464	2532	4704
45°	553	1888	4190
50°	263	1301	3571
55°	203	714	2762
60°	143	606	1815
65°	106	525	759
70°	103	494	494
75°	136	517	517
80°	203	615	561
85°	404	1024	822

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4190 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.9	7.6
10°-20°	135.7	19.6
20°-30°	168.0	24.3
30°-40°	150.6	21.8
40°-50°	98.8	14.3
50°-60°	49.4	7.1
60°-70°	19.3	2.8
70°-80°	10.9	1.6
80°-90°	6.7	1.0
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°	356.7	51.5
0°-40°	507.3	73.3
0°-60°	655.5	94.7
0°-90°	692.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	692.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	577	577	577	577	577	
5°	555	564	564	570	576	51
15°	446	464	480	512	533	124
25°	308	327	356	407	446	140
35°	164	186	227	295	352	102
45°	33	54	114	195	252	32
55°	10	12	35	96	135	9
65°	4	11	19	25	27	4
75°	3	11	11	11	11	3
85°	3	8	8	8	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	576.7	576.7	576.7	576.7	576.7
2.5°	569.1	577.4	572.1	572.9	573.6
5°	554.7	563.8	563.8	569.8	575.9
7.5°	532.7	543.3	550.9	561.5	569.8
10°	506.2	519.1	529.7	548.6	560.0
12.5°	477.4	493.3	506.9	531.9	547.9
15°	445.6	463.8	480.4	512.2	532.7
17.5°	411.5	429.7	451.6	488.8	513.8
20°	378.1	396.3	421.3	463.0	493.3
22.5°	343.3	362.2	388.7	435.0	470.6
25°	307.7	326.6	356.1	406.9	446.3
27.5°	272.0	291.0	324.3	379.6	422.8
30°	236.4	255.4	291.0	350.1	398.6
32.5°	200.8	221.3	258.4	322.8	374.3
35°	163.7	185.7	226.6	294.8	352.4
37.5°	129.6	150.0	196.3	270.5	330.4
40°	95.5	117.5	165.2	247.0	306.9
42.5°	62.1	85.6	137.2	221.3	280.4
45°	33.3	53.8	113.7	194.7	252.3
47.5°	18.2	29.6	91.7	166.7	223.5
50°	14.4	16.7	71.2	142.5	195.5
52.5°	12.1	13.6	50.8	119.7	164.4
55°	9.9	12.1	34.9	95.5	134.9
57.5°	8.3	10.6	27.3	74.3	105.3
60°	6.1	9.1	25.8	54.6	77.3
62.5°	4.5	9.9	22.7	37.9	50.8
65°	3.8	11.4	18.9	25.0	27.3
67.5°	3.0	12.1	16.7	15.9	15.9
70°	3.0	11.4	14.4	13.6	14.4
72.5°	3.0	12.1	12.9	12.1	12.9
75°	3.0	11.4	11.4	11.4	11.4
77.5°	3.0	10.6	10.6	9.9	9.9
80°	3.0	9.1	9.1	9.1	8.3
82.5°	3.0	8.3	8.3	8.3	6.8
85°	3.0	7.6	7.6	7.6	6.1
87.5°	2.3	6.8	7.6	6.8	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)