

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: P1059371

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059371
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-67)
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-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

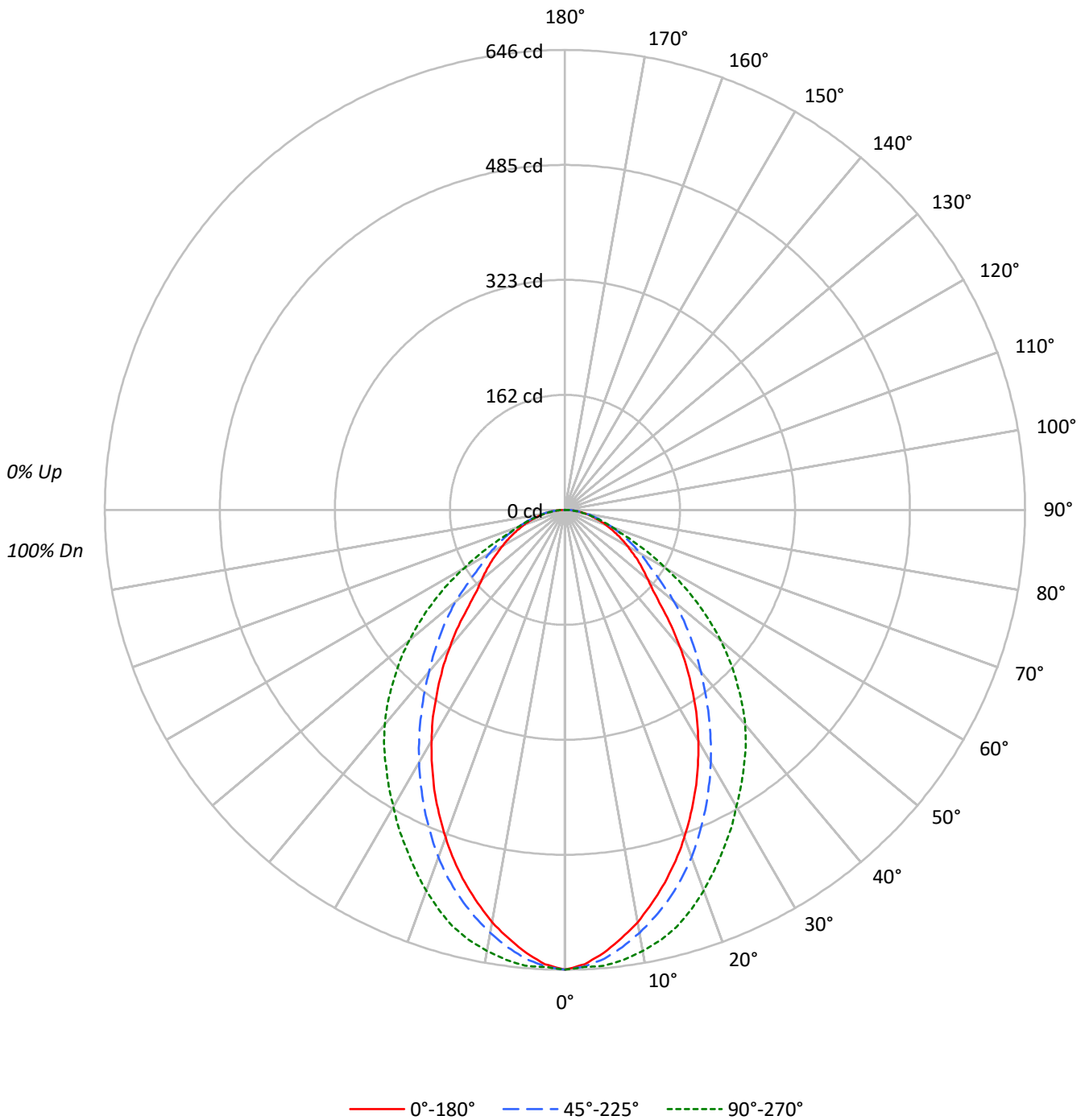
Lumens per Lamp: N/A
Luminaire Lumens: 1166.5 lumens
Efficiency: N/A
Efficacy: 45.2 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				75
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65				65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57				57
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53	51				51
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45				45
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41				41
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37				37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35	34				34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31				31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7583	7583	7583
5°	7362	7460	7576
10°	7013	7195	7501
15°	6589	6875	7372
20°	6121	6489	7114
25°	5620	6032	6816
30°	5081	5554	6529
35°	4483	5046	6283
40°	3852	4550	6035
45°	3168	4098	5658
50°	2780	3652	5214
55°	2573	3116	4619
60°	2365	2863	3823
65°	2209	2628	3009
70°	2081	2390	2390
75°	1960	2200	2060
80°	1846	1995	1738
85°	1738	1940	1320

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5658 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.7	5.1
10°-20°	160.1	13.7
20°-30°	217.0	18.6
30°-40°	226.9	19.5
40°-50°	196.8	16.9
50°-60°	146.4	12.6
60°-70°	93.9	8.1
70°-80°	50.4	4.3
80°-90°	15.2	1.3
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°	436.8	37.4
0°-40°	663.7	56.9
0°-60°	1007.0	86.3
0°-90°	1166.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1166.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	646	646	646	646	646	
5°	625	635	633	637	643	58
15°	542	555	566	588	606	152
25°	434	447	466	497	526	199
35°	313	328	352	397	438	195
45°	191	205	247	300	341	150
55°	126	129	152	195	226	112
65°	80	86	95	101	108	79
75°	43	50	48	46	45	46
85°	13	16	14	12	10	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	645.8	645.8	645.8	645.8	645.8
2.5°	638.9	648.0	642.0	642.0	642.7
5°	624.6	635.2	632.9	637.4	642.7
7.5°	607.1	618.5	619.3	629.9	637.4
10°	588.2	599.6	603.4	618.5	629.1
12.5°	565.5	578.4	585.2	604.1	619.3
15°	542.0	554.9	565.5	588.2	606.4
17.5°	517.1	529.9	543.6	569.3	589.0
20°	489.8	503.4	519.3	545.1	569.3
22.5°	461.8	476.2	492.8	520.8	548.1
25°	433.8	447.4	465.6	496.6	526.1
27.5°	404.3	418.6	437.6	471.6	504.9
30°	374.7	389.1	409.6	445.9	481.5
32.5°	344.5	358.8	380.8	421.7	460.3
35°	312.7	327.8	352.0	396.7	438.3
37.5°	282.4	296.8	324.0	373.2	417.1
40°	251.3	266.5	296.8	349.8	393.7
42.5°	221.1	236.2	271.8	324.8	367.9
45°	190.8	205.2	246.8	299.8	340.7
47.5°	167.3	177.9	223.3	273.3	314.2
50°	152.2	156.0	199.9	247.6	285.4
52.5°	138.5	141.6	174.1	221.8	255.9
55°	125.7	128.7	152.2	195.3	225.6
57.5°	112.8	116.6	135.5	168.1	195.3
60°	100.7	105.2	121.9	143.8	162.8
62.5°	90.1	95.4	108.3	121.9	134.8
65°	79.5	86.3	94.6	100.7	108.3
67.5°	69.6	77.2	81.8	83.3	84.0
70°	60.6	68.1	69.6	69.6	69.6
72.5°	51.5	59.8	58.3	57.5	56.8
75°	43.2	50.0	48.5	46.2	45.4
77.5°	34.8	40.9	38.6	37.1	34.8
80°	27.3	31.8	29.5	28.0	25.7
82.5°	20.4	23.5	21.2	19.7	17.4
85°	12.9	15.9	14.4	12.1	9.8
87.5°	6.8	9.1	7.6	6.8	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)