

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 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: S123RDRP-S775D927-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
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: S123RDRP-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

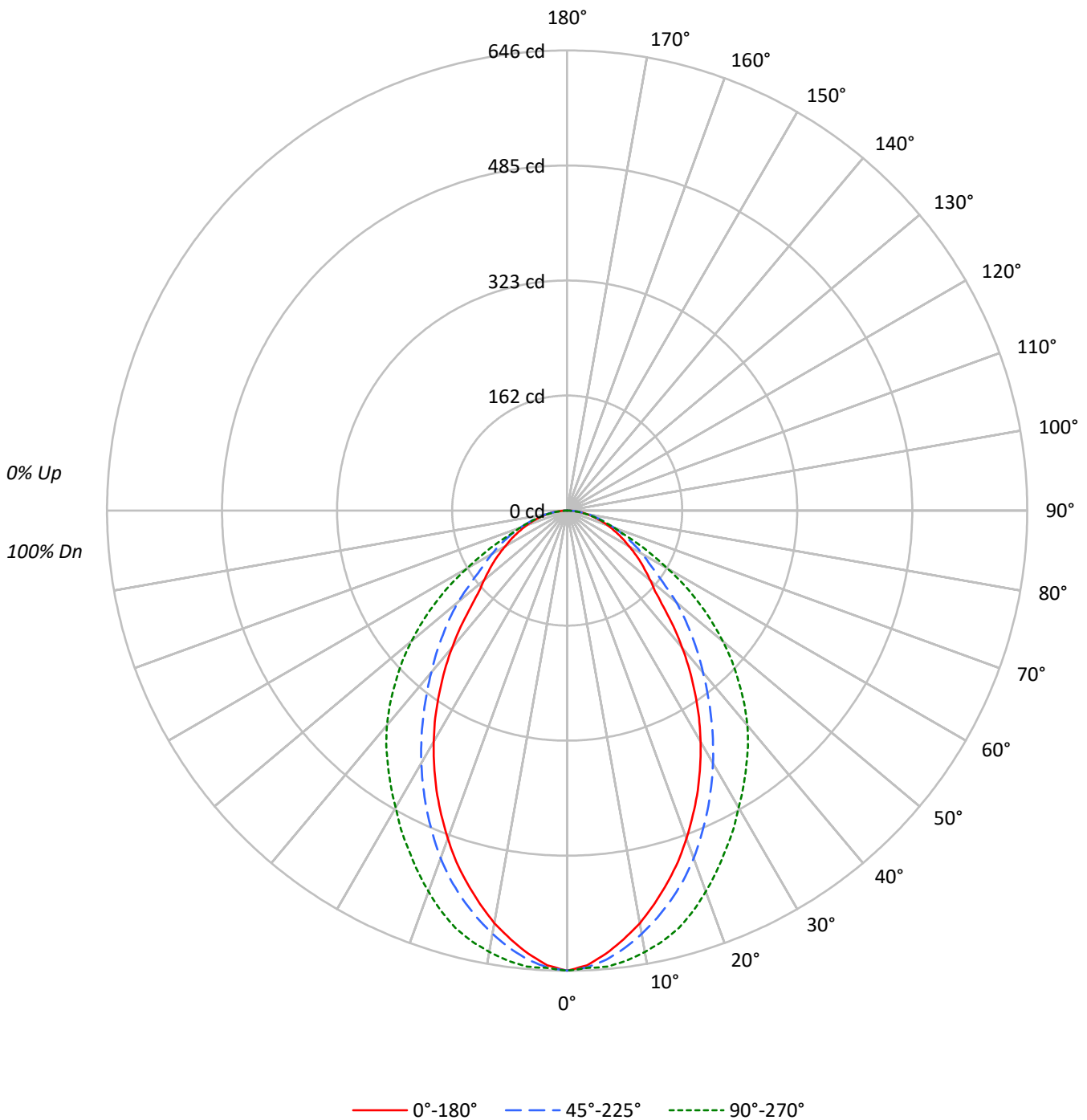
Lumens per Lamp: N/A
Luminaire Lumens: 1166.5 lumens
Efficiency: N/A
Efficacy: 45.2 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (A_{in}): 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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53	51
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	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



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	13.82	15.31	14.19	15.62	15.94	16.58	18.06	16.95	18.38	18.69
	3H	15.53	16.86	15.91	17.19	17.55	17.60	18.93	17.98	19.26	19.62
	4H	16.20	17.44	16.60	17.79	18.17	17.97	19.21	18.37	19.56	19.94
	6H	16.70	17.85	17.11	18.21	18.61	18.22	19.37	18.63	19.74	20.13
	8H	16.87	17.97	17.30	18.36	18.76	18.29	19.39	18.72	19.78	20.18
	12H	17.00	18.05	17.43	18.43	18.86	18.33	19.37	18.76	19.76	20.19
4H	2H	14.60	15.85	15.00	16.19	16.57	16.85	18.10	17.25	18.45	18.83
	3H	16.53	17.56	16.94	17.96	18.36	18.11	19.14	18.52	19.54	19.94
	4H	17.34	18.27	17.77	18.68	19.12	18.59	19.52	19.03	19.94	20.38
	6H	17.98	18.79	18.44	19.23	19.69	18.97	19.78	19.43	20.22	20.68
	8H	18.20	18.96	18.67	19.40	19.87	19.08	19.84	19.55	20.28	20.75
	12H	18.38	19.05	18.86	19.53	20.00	19.15	19.83	19.64	20.31	20.78
8H	4H	17.66	18.41	18.12	18.86	19.32	18.78	19.54	19.25	19.98	20.45
	6H	18.45	19.07	18.95	19.57	20.04	19.27	19.90	19.77	20.39	20.87
	8H	18.78	19.34	19.29	19.85	20.34	19.45	20.01	19.96	20.52	21.01
	12H	19.05	19.55	19.56	20.04	20.61	19.58	20.08	20.09	20.57	21.13
12H	4H	17.68	18.35	18.16	18.83	19.30	18.80	19.47	19.28	19.95	20.42
	6H	18.50	19.06	19.02	19.57	20.06	19.31	19.87	19.82	20.38	20.87
	8H	18.90	19.39	19.41	19.89	20.45	19.54	20.03	20.05	20.53	21.09