

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: P1059401

Luminaire Tested: S123RDRP-S775D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059401
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-69)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S775D950-X4F0-XX-UDD-BVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

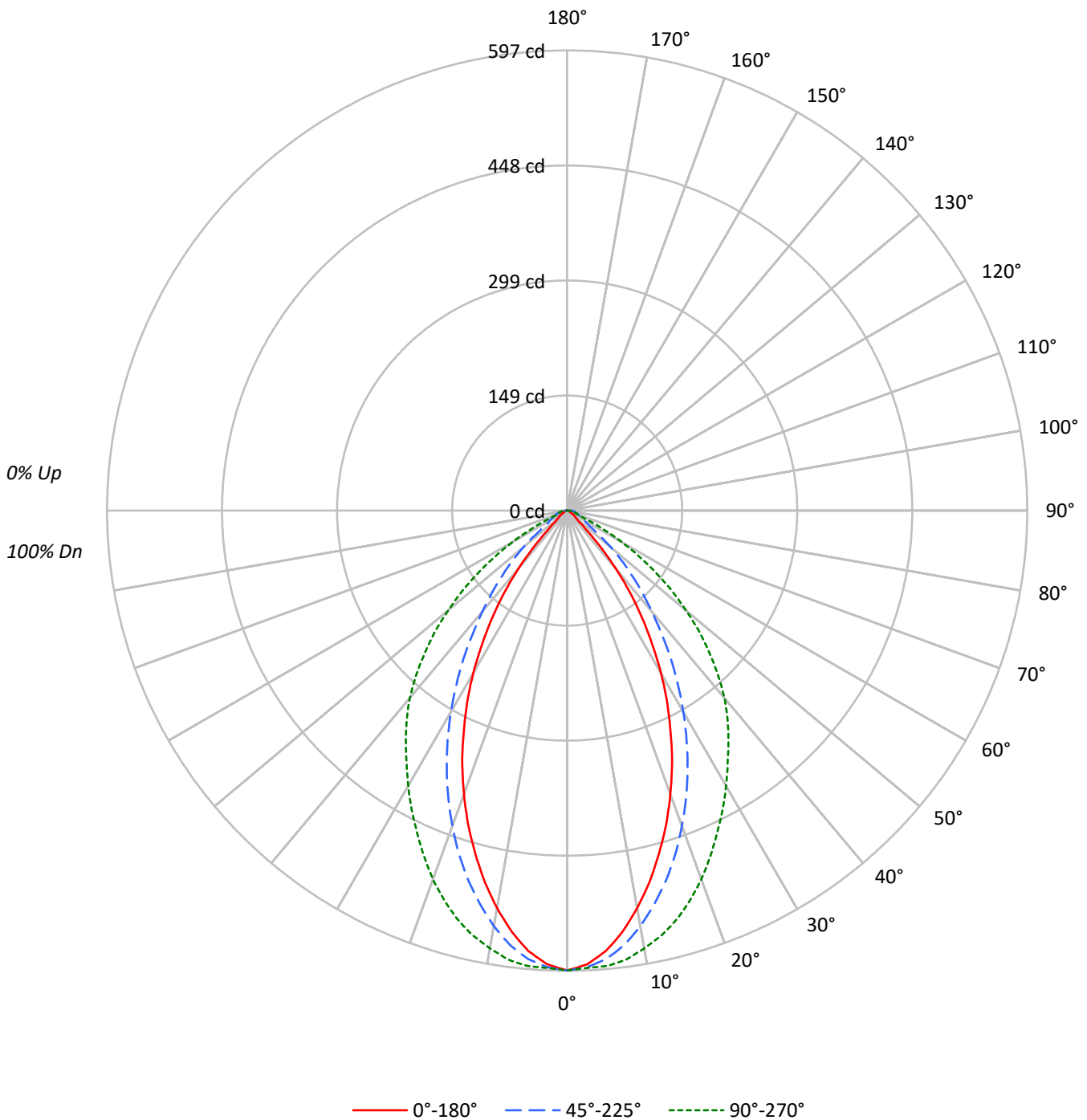
Lumens per Lamp: N/A
Luminaire Lumens: 716.6 lumens
Efficiency: N/A
Efficacy: 27.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	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	64	58	53	63	57	53	62	56	52	61	56	52	50
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46
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	41	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7006	7006	7006
5°	6764	6883	6990
10°	6244	6527	6875
15°	5601	6033	6676
20°	4891	5438	6362
25°	4114	4787	5969
30°	3303	4083	5592
35°	2420	3362	5231
40°	1496	2615	4867
45°	576	1970	4333
50°	283	1350	3666
55°	223	747	2876
60°	150	622	1928
65°	128	558	861
70°	124	501	501
75°	163	540	495
80°	243	676	555
85°	364	1105	741

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4333 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.7	7.6
10°-20°	140.1	19.5
20°-30°	173.8	24.3
30°-40°	155.7	21.7
40°-50°	102.4	14.3
50°-60°	51.3	7.2
60°-70°	20.2	2.8
70°-80°	11.3	1.6
80°-90°	7.1	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°	368.6	51.4
0°-40°	524.3	73.2
0°-60°	678.0	94.6
0°-90°	716.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	716.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	597	597	597	597	597	
5°	574	583	584	588	593	53
15°	461	475	496	530	549	128
25°	318	338	370	422	461	145
35°	169	192	234	306	365	105
45°	35	58	119	200	261	33
55°	11	13	36	98	140	10
65°	5	13	20	26	31	5
75°	4	12	12	11	11	4
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°	596.6	596.6	596.6	596.6	596.6
2.5°	589.3	597.6	593.0	593.0	593.9
5°	573.8	583.0	583.9	587.5	593.0
7.5°	551.0	562.9	568.4	579.3	587.5
10°	523.7	536.4	547.4	566.5	576.6
12.5°	493.6	506.3	522.7	549.2	564.7
15°	460.7	475.3	496.3	530.0	549.2
17.5°	427.0	441.6	467.1	505.4	530.0
20°	391.4	407.8	435.2	479.0	509.1
22.5°	355.8	374.0	403.2	450.7	485.3
25°	317.5	337.5	369.5	421.5	460.7
27.5°	281.0	302.0	335.7	392.3	437.0
30°	243.6	264.6	301.1	362.2	412.4
32.5°	205.3	229.0	267.3	333.9	387.7
35°	168.8	191.6	234.5	306.5	364.9
37.5°	133.2	156.0	200.7	280.1	342.1
40°	97.6	121.3	170.6	254.5	317.5
42.5°	63.9	88.5	144.1	229.0	290.1
45°	34.7	57.5	118.6	199.8	260.9
47.5°	19.2	31.0	95.8	172.4	232.6
50°	15.5	17.3	73.9	146.9	200.7
52.5°	12.8	14.6	52.9	122.2	171.5
55°	10.9	12.8	36.5	98.5	140.5
57.5°	9.1	10.9	29.2	75.7	110.4
60°	6.4	10.9	26.5	55.6	82.1
62.5°	5.5	10.9	22.8	38.3	54.7
65°	4.6	12.8	20.1	25.5	31.0
67.5°	3.6	12.8	17.3	16.4	16.4
70°	3.6	12.8	14.6	13.7	14.6
72.5°	3.6	13.7	13.7	12.8	12.8
75°	3.6	11.9	11.9	10.9	10.9
77.5°	3.6	10.9	10.9	10.0	10.0
80°	3.6	10.0	10.0	9.1	8.2
82.5°	3.6	9.1	9.1	8.2	7.3
85°	2.7	8.2	8.2	8.2	5.5
87.5°	2.7	7.3	8.2	7.3	4.6
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	0.00	0.45	0.00	0.76	1.08	13.31	14.57	13.67	14.88	15.19
	3H	1.73	2.84	2.11	3.17	3.54	13.39	14.50	13.77	14.83	15.20
	4H	2.89	3.93	3.30	4.28	4.67	13.45	14.49	13.85	14.84	15.22
	6H	3.93	4.88	4.35	5.26	5.65	13.55	14.50	13.96	14.87	15.26
	8H	4.47	5.37	4.90	5.76	6.16	13.61	14.51	14.04	14.90	15.30
	12H	4.94	5.80	5.38	6.19	6.62	13.68	14.54	14.11	14.92	15.35
4H	2H	2.48	3.51	2.88	3.87	4.25	13.17	14.20	13.57	14.56	14.94
	3H	4.94	5.79	5.36	6.20	6.60	13.34	14.19	13.76	14.59	15.00
	4H	6.29	7.05	6.73	7.47	7.91	13.47	14.23	13.91	14.65	15.09
	6H	7.41	8.06	7.88	8.51	8.98	13.68	14.34	14.15	14.79	15.25
	8H	7.92	8.53	8.39	8.97	9.45	13.81	14.42	14.28	14.87	15.34
	12H	8.37	8.91	8.85	9.39	9.87	13.97	14.51	14.46	14.99	15.47
8H	4H	7.21	7.82	7.68	8.26	8.74	13.47	14.08	13.94	14.53	15.00
	6H	8.79	9.29	9.30	9.79	10.27	13.80	14.30	14.30	14.80	15.28
	8H	9.62	10.07	10.14	10.58	11.08	14.03	14.48	14.55	15.00	15.49
	12H	10.39	10.79	10.91	11.29	11.86	14.36	14.75	14.87	15.25	15.82
12H	4H	7.37	7.91	7.86	8.40	8.87	13.46	14.00	13.95	14.49	14.96
	6H	9.11	9.56	9.63	10.08	10.57	13.83	14.28	14.35	14.80	15.29
	8H	10.11	10.51	10.63	11.01	11.58	14.14	14.54	14.66	15.04	15.61