

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: P1059407

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059407
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-S775D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

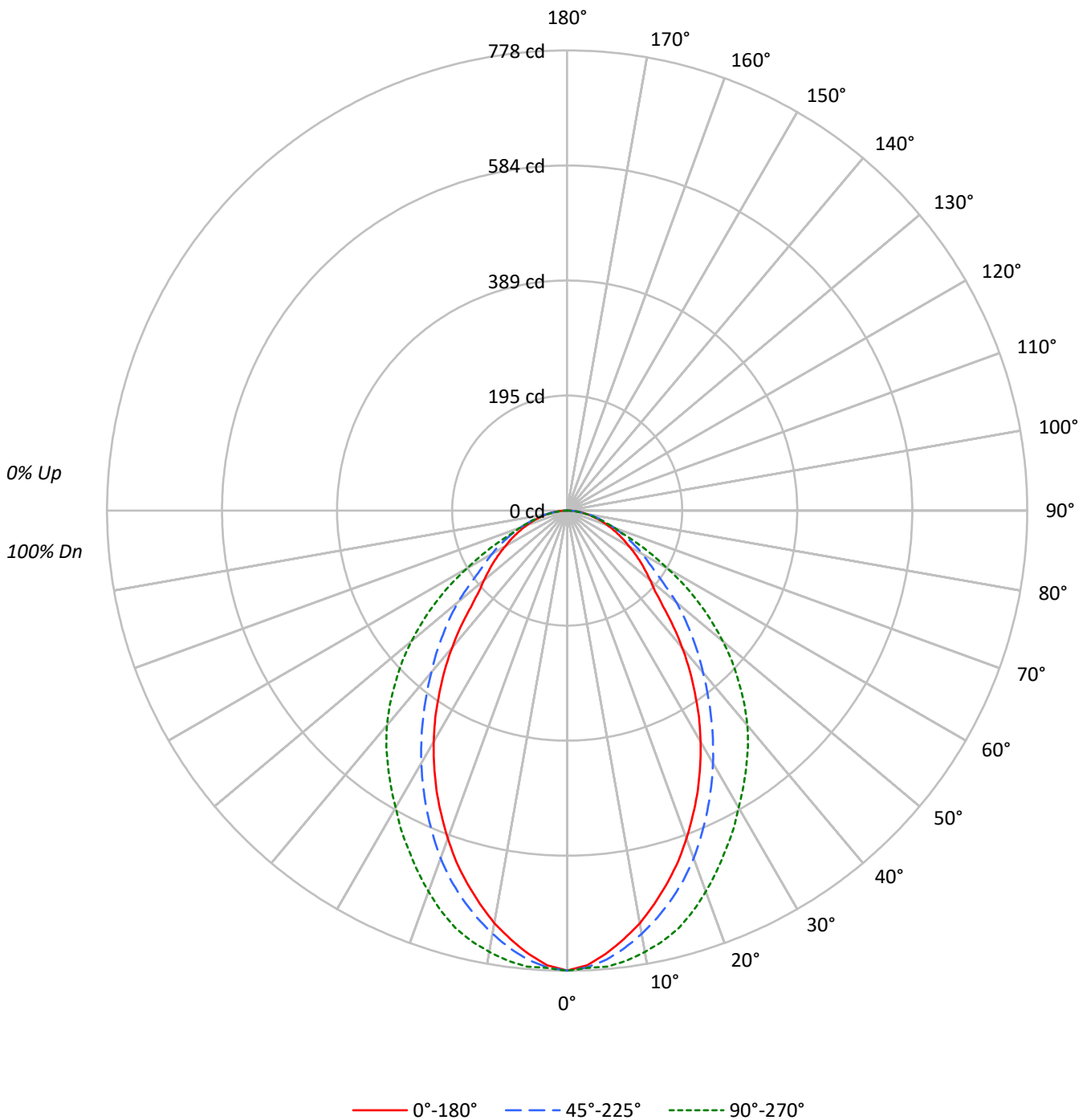
Lumens per Lamp: N/A
Luminaire Lumens: 1404.8 lumens
Efficiency: N/A
Efficacy: 54.4 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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°	9132	9132	9132
5°	8865	8984	9123
10°	8447	8664	9033
15°	7936	8279	8878
20°	7371	7815	8567
25°	6768	7265	8209
30°	6119	6687	7862
35°	5397	6077	7567
40°	4640	5478	7267
45°	3814	4935	6814
50°	3347	4397	6279
55°	3097	3751	5562
60°	2849	3448	4603
65°	2659	3167	3623
70°	2503	2881	2881
75°	2359	2645	2482
80°	2218	2407	2096
85°	2088	2331	1603

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6814 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.9	5.1
10°-20°	192.8	13.7
20°-30°	261.4	18.6
30°-40°	273.3	19.5
40°-50°	237.0	16.9
50°-60°	176.3	12.6
60°-70°	113.1	8.1
70°-80°	60.7	4.3
80°-90°	18.3	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°	526.1	37.4
0°-40°	799.3	56.9
0°-60°	1212.6	86.3
0°-90°	1404.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1404.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	778	778	778	778	778	
5°	752	765	762	768	774	70
15°	653	668	681	708	730	183
25°	522	539	561	598	634	239
35°	376	395	424	478	528	235
45°	230	247	297	361	410	181
55°	151	155	183	235	272	135
65°	96	104	114	121	130	95
75°	52	60	58	56	55	55
85°	16	19	17	15	12	18
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	777.7	777.7	777.7	777.7	777.7
2.5°	769.5	780.4	773.1	773.1	774.0
5°	752.1	764.9	762.2	767.6	774.0
7.5°	731.2	744.8	745.8	758.5	767.6
10°	708.4	722.1	726.6	744.8	757.6
12.5°	681.0	696.5	704.7	727.5	745.8
15°	652.8	668.3	681.0	708.4	730.3
17.5°	622.7	638.2	654.6	685.6	709.3
20°	589.9	606.3	625.4	656.4	685.6
22.5°	556.1	573.4	593.5	627.2	660.1
25°	522.4	538.8	560.7	598.1	633.6
27.5°	486.8	504.2	527.0	568.0	608.1
30°	451.3	468.6	493.2	537.0	579.8
32.5°	414.8	432.1	458.6	507.8	554.3
35°	376.5	394.8	423.9	477.7	527.9
37.5°	340.1	357.4	390.2	449.5	502.3
40°	302.7	320.9	357.4	421.2	474.1
42.5°	266.2	284.4	327.3	391.1	443.1
45°	229.7	247.1	297.2	361.0	410.3
47.5°	201.5	214.2	268.9	329.1	378.3
50°	183.2	187.8	240.7	298.1	343.7
52.5°	166.8	170.5	209.7	267.1	308.1
55°	151.3	155.0	183.2	235.2	271.7
57.5°	135.8	140.4	163.2	202.4	235.2
60°	121.3	126.7	146.8	173.2	196.0
62.5°	108.5	114.9	130.4	146.8	162.3
65°	95.7	103.9	114.0	121.3	130.4
67.5°	83.9	93.0	98.5	100.3	101.2
70°	72.9	82.1	83.9	83.9	83.9
72.5°	62.0	72.0	70.2	69.3	68.4
75°	52.0	60.2	58.3	55.6	54.7
77.5°	41.9	49.2	46.5	44.7	41.9
80°	32.8	38.3	35.6	33.7	31.0
82.5°	24.6	28.3	25.5	23.7	21.0
85°	15.5	19.1	17.3	14.6	11.9
87.5°	8.2	10.9	9.1	8.2	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	14.47	15.95	14.83	16.27	16.58	17.23	18.71	17.59	19.02	19.34
	3H	16.18	17.51	16.56	17.84	18.20	18.25	19.58	18.63	19.90	20.27
	4H	16.84	18.09	17.24	18.44	18.82	18.61	19.86	19.01	20.21	20.59
	6H	17.34	18.49	17.75	18.86	19.25	18.87	20.02	19.28	20.38	20.78
	8H	17.52	18.61	17.95	19.00	19.41	18.94	20.03	19.37	20.42	20.82
	12H	17.65	18.69	18.08	19.08	19.51	18.97	20.02	19.40	20.40	20.83
4H	2H	15.25	16.49	15.65	16.84	17.22	17.50	18.74	17.90	19.09	19.47
	3H	17.17	18.21	17.58	18.61	19.01	18.75	19.79	19.16	20.19	20.59
	4H	17.98	18.91	18.42	19.33	19.77	19.24	20.17	19.67	20.58	21.02
	6H	18.62	19.43	19.08	19.87	20.33	19.62	20.43	20.08	20.87	21.33
	8H	18.85	19.61	19.31	20.05	20.52	19.73	20.49	20.20	20.93	21.40
	12H	19.02	19.70	19.51	20.18	20.65	19.80	20.48	20.29	20.96	21.43
8H	4H	18.30	19.06	18.77	19.50	19.97	19.43	20.19	19.89	20.63	21.10
	6H	19.09	19.72	19.59	20.21	20.69	19.92	20.54	20.42	21.03	21.51
	8H	19.42	19.98	19.94	20.49	20.98	20.09	20.65	20.61	21.17	21.65
	12H	19.70	20.20	20.21	20.69	21.25	20.23	20.72	20.74	21.22	21.78
12H	4H	18.33	19.00	18.81	19.48	19.95	19.45	20.12	19.93	20.60	21.07
	6H	19.15	19.71	19.66	20.22	20.71	19.95	20.52	20.47	21.03	21.52
	8H	19.54	20.04	20.05	20.53	21.10	20.18	20.68	20.70	21.17	21.74