

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: P1059402

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059402
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: S123RDRP-S775D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

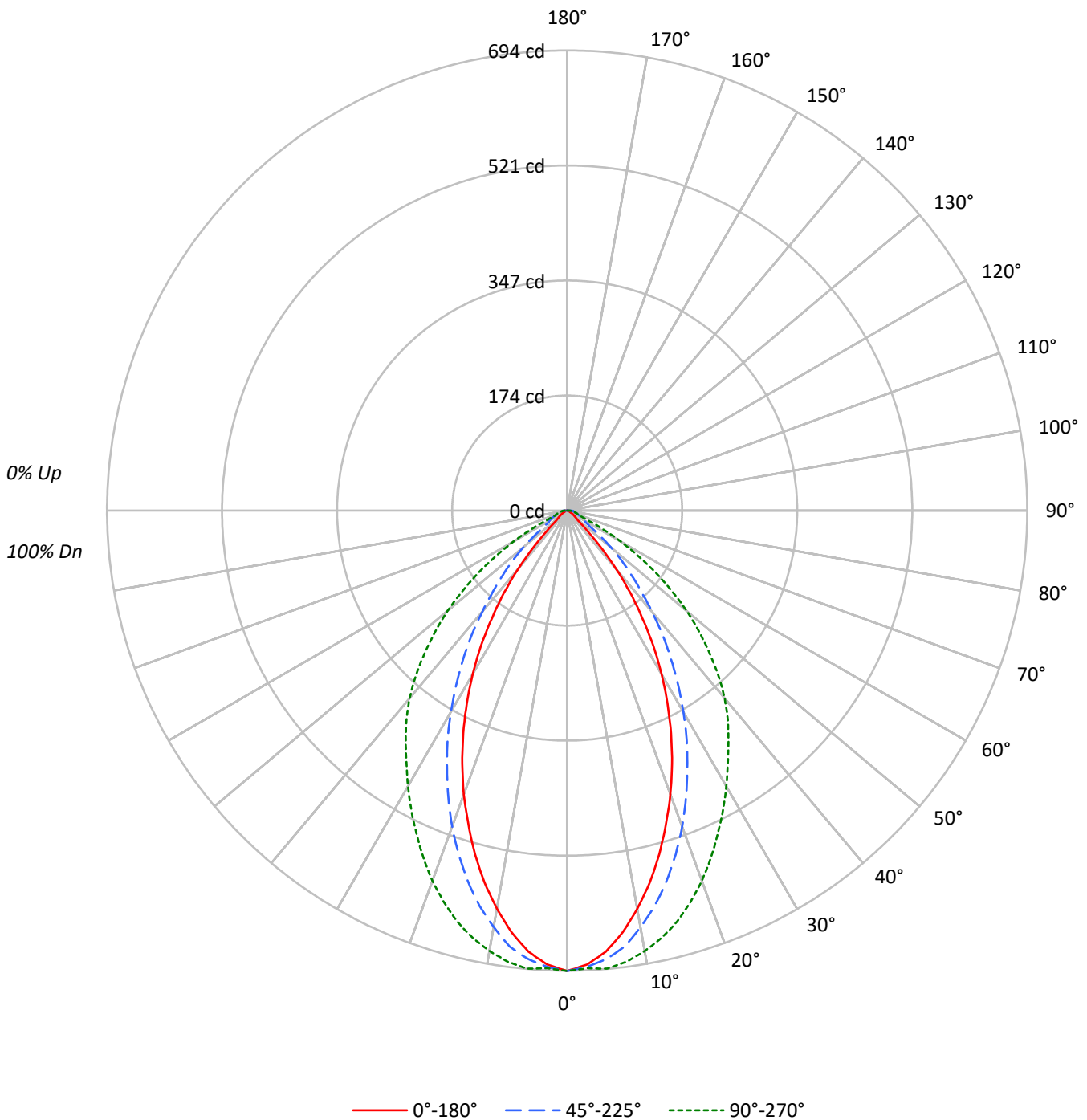
Lumens per Lamp: N/A
Luminaire Lumens: 833.8 lumens
Efficiency: N/A
Efficacy: 32.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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°	8155	8155	8155
5°	7874	8002	8174
10°	7269	7606	8041
15°	6523	7034	7798
20°	5691	6340	7424
25°	4800	5557	6964
30°	3860	4751	6508
35°	2825	3912	6082
40°	1763	3049	5665
45°	668	2273	5047
50°	316	1567	4300
55°	244	860	3325
60°	171	728	2186
65°	128	633	914
70°	127	594	594
75°	168	622	622
80°	250	744	676
85°	498	1226	984

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5047 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.7	7.6
10°-20°	163.5	19.6
20°-30°	202.3	24.3
30°-40°	181.4	21.8
40°-50°	118.9	14.3
50°-60°	59.5	7.1
60°-70°	23.2	2.8
70°-80°	13.1	1.6
80°-90°	8.1	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°	429.6	51.5
0°-40°	611.0	73.3
0°-60°	789.4	94.7
0°-90°	833.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	833.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	694	694	694	694	694	
5°	668	679	679	686	694	62
15°	537	558	579	617	642	149
25°	370	393	429	490	538	169
35°	197	224	273	355	424	123
45°	40	65	137	234	304	38
55°	12	15	42	115	162	11
65°	5	14	23	30	33	5
75°	4	14	14	14	14	4
85°	4	9	9	9	7	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	694.5	694.5	694.5	694.5	694.5
2.5°	685.3	695.4	689.0	689.9	690.8
5°	668.0	678.9	678.9	686.2	693.5
7.5°	641.5	654.3	663.4	676.2	686.2
10°	609.6	625.1	637.9	660.7	674.4
12.5°	574.9	594.1	610.5	640.6	659.8
15°	536.6	558.5	578.6	616.9	641.5
17.5°	495.5	517.4	543.9	588.6	618.7
20°	455.4	477.3	507.4	557.6	594.1
22.5°	413.4	436.2	468.1	523.8	566.7
25°	370.5	393.3	428.9	490.0	537.5
27.5°	327.6	350.4	390.6	457.2	509.2
30°	284.7	307.5	350.4	421.6	480.0
32.5°	241.8	266.5	311.2	388.7	450.8
35°	197.1	223.6	272.9	355.0	424.3
37.5°	156.0	180.7	236.4	325.8	397.9
40°	115.0	141.4	198.9	297.5	369.6
42.5°	74.8	103.1	165.2	266.5	337.6
45°	40.2	64.8	136.9	234.5	303.9
47.5°	21.9	35.6	110.4	200.8	269.2
50°	17.3	20.1	85.8	171.6	235.4
52.5°	14.6	16.4	61.1	144.2	198.0
55°	11.9	14.6	42.0	115.0	162.4
57.5°	10.0	12.8	32.9	89.4	126.8
60°	7.3	11.0	31.0	65.7	93.1
62.5°	5.5	11.9	27.4	45.6	61.1
65°	4.6	13.7	22.8	30.1	32.9
67.5°	3.7	14.6	20.1	19.2	19.2
70°	3.7	13.7	17.3	16.4	17.3
72.5°	3.7	14.6	15.5	14.6	15.5
75°	3.7	13.7	13.7	13.7	13.7
77.5°	3.7	12.8	12.8	11.9	11.9
80°	3.7	11.0	11.0	11.0	10.0
82.5°	3.7	10.0	10.0	10.0	8.2
85°	3.7	9.1	9.1	9.1	7.3
87.5°	2.7	8.2	9.1	8.2	5.5
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	0.91	0.02	1.22	1.54	13.89	15.15	14.26	15.46	15.78
	3H	1.99	3.11	2.37	3.44	3.80	13.97	15.09	14.35	15.42	15.78
	4H	3.10	4.14	3.51	4.49	4.87	14.05	15.09	14.46	15.44	15.82
	6H	4.10	5.05	4.52	5.42	5.82	14.16	15.11	14.57	15.48	15.87
	8H	4.59	5.49	5.02	5.88	6.28	14.21	15.11	14.65	15.50	15.91
	12H	5.15	6.01	5.58	6.39	6.82	14.29	15.15	14.73	15.54	15.97
4H	2H	2.90	3.93	3.30	4.28	4.67	13.75	14.78	14.15	15.13	15.52
	3H	5.22	6.06	5.63	6.47	6.87	13.92	14.77	14.34	15.17	15.58
	4H	6.59	7.35	7.03	7.77	8.21	14.08	14.83	14.51	15.25	15.70
	6H	7.69	8.34	8.15	8.79	9.26	14.30	14.95	14.77	15.40	15.87
	8H	8.15	8.76	8.62	9.20	9.68	14.43	15.04	14.90	15.48	15.95
	12H	8.64	9.18	9.13	9.67	10.14	14.60	15.14	15.09	15.62	16.10
8H	4H	7.57	8.18	8.04	8.63	9.10	14.07	14.68	14.54	15.13	15.60
	6H	9.10	9.60	9.60	10.09	10.58	14.41	14.91	14.92	15.41	15.89
	8H	9.87	10.32	10.39	10.83	11.33	14.64	15.09	15.17	15.61	16.10
	12H	10.67	11.07	11.19	11.56	12.14	14.98	15.38	15.49	15.87	16.44
12H	4H	7.75	8.28	8.23	8.77	9.24	14.06	14.60	14.54	15.08	15.55
	6H	9.41	9.86	9.93	10.38	10.87	14.43	14.88	14.96	15.40	15.89
	8H	10.36	10.76	10.88	11.25	11.83	14.74	15.14	15.26	15.63	16.21