

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: P1059351

Luminaire Tested: S123RDRP-S775D840-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059351
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S775D840-X4F0-XX-UDD-SVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

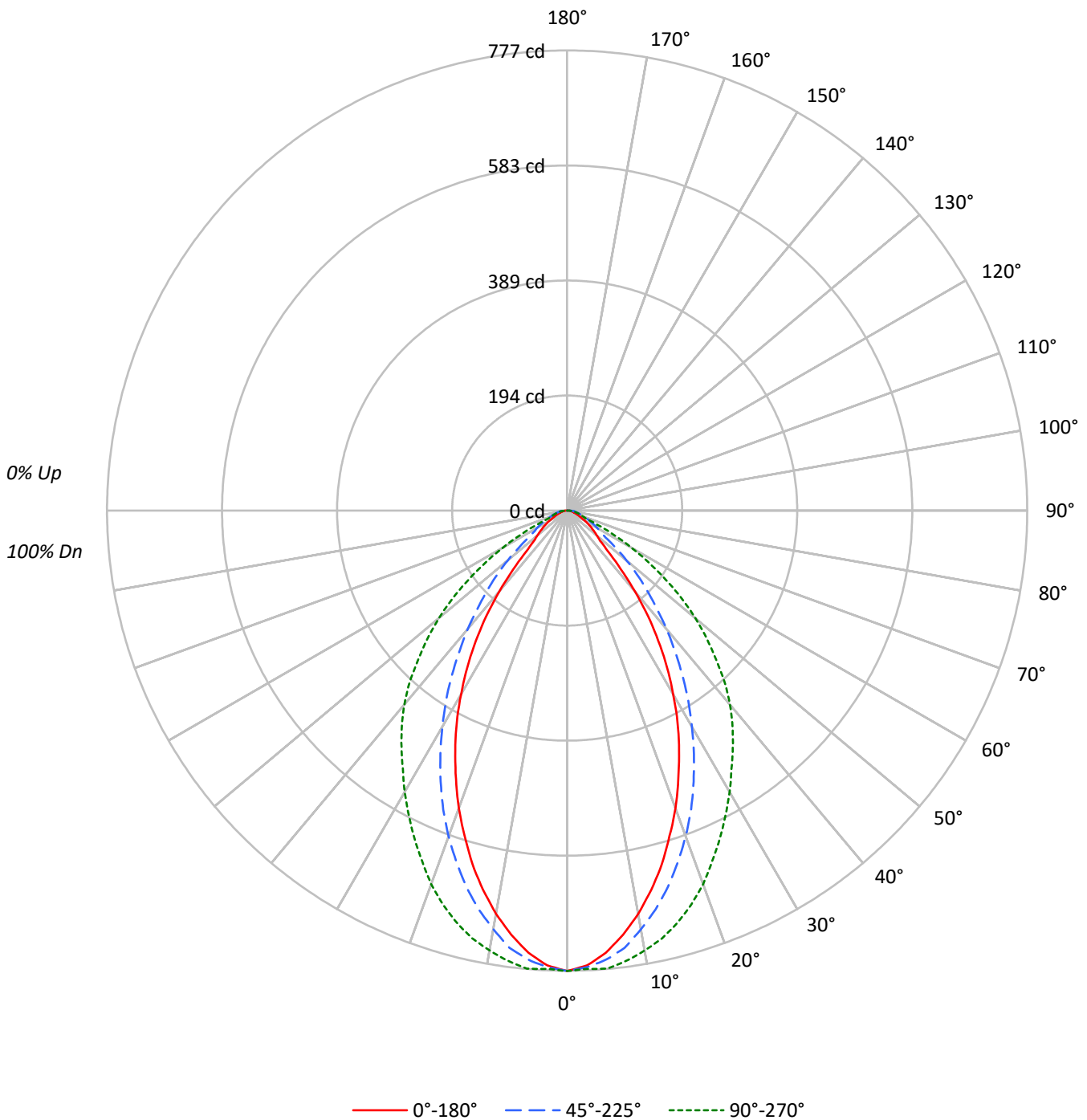
Lumens per Lamp: N/A
Luminaire Lumens: 1043.6 lumens
Efficiency: N/A
Efficacy: 40.5 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9129	9129	9129
5°	8833	8970	9153
10°	8245	8556	8994
15°	7514	7995	8759
20°	6685	7313	8387
25°	5793	6544	7909
30°	4858	5710	7438
35°	3849	4860	6991
40°	2724	3998	6558
45°	1604	3160	5902
50°	1200	2399	5170
55°	1009	1621	4152
60°	817	1383	2947
65°	645	1181	1556
70°	563	1027	961
75°	526	962	921
80°	521	1048	913
85°	647	1563	1172

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5902 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.5	6.9
10°-20°	186.0	17.8
20°-30°	236.8	22.7
30°-40°	222.8	21.3
40°-50°	160.4	15.4
50°-60°	92.7	8.9
60°-70°	42.3	4.1
70°-80°	21.1	2.0
80°-90°	10.0	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°	494.3	47.4
0°-40°	717.1	68.7
0°-60°	970.1	93.0
0°-90°	1043.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1043.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	777	777	777	777	777	
5°	749	762	761	769	776	70
15°	618	640	658	694	720	172
25°	447	470	505	561	610	205
35°	268	292	339	417	488	167
45°	97	121	190	286	355	82
55°	49	51	79	151	203	44
65°	23	33	42	47	56	24
75°	12	22	21	20	20	12
85°	5	11	12	11	9	5
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	777.4	777.4	777.4	777.4	777.4
2.5°	768.7	778.4	771.6	772.6	774.5
5°	749.4	762.0	761.0	768.7	776.5
7.5°	722.4	736.9	744.6	756.2	766.8
10°	691.5	707.9	717.6	738.8	754.3
12.5°	655.7	677.0	689.6	717.6	739.8
15°	618.1	640.3	657.7	694.4	720.5
17.5°	575.6	599.7	621.9	665.4	697.3
20°	535.0	558.2	585.2	632.6	671.2
22.5°	490.6	515.7	546.6	596.8	640.3
25°	447.1	470.3	505.1	561.1	610.4
27.5°	403.7	426.9	463.6	525.4	579.5
30°	358.3	382.4	421.1	489.6	548.6
32.5°	313.9	337.0	380.5	454.9	516.7
35°	268.5	291.7	339.0	417.2	487.7
37.5°	224.1	248.2	298.4	386.3	458.7
40°	177.7	203.8	260.8	354.4	427.8
42.5°	134.2	162.2	223.1	321.6	394.0
45°	96.6	120.7	190.3	285.9	355.4
47.5°	75.3	87.9	160.3	249.2	319.7
50°	65.7	67.6	131.3	215.4	283.0
52.5°	57.0	58.9	103.3	183.5	244.3
55°	49.3	51.2	79.2	150.7	202.8
57.5°	41.5	44.4	65.7	119.8	163.2
60°	34.8	38.6	58.9	91.7	125.5
62.5°	28.0	34.8	50.2	67.6	89.8
65°	23.2	32.8	42.5	47.3	56.0
67.5°	19.3	29.9	35.7	33.8	32.8
70°	16.4	27.0	29.9	27.0	28.0
72.5°	13.5	25.1	25.1	23.2	23.2
75°	11.6	22.2	21.2	20.3	20.3
77.5°	9.7	19.3	18.3	17.4	16.4
80°	7.7	15.5	15.5	14.5	13.5
82.5°	6.8	12.6	12.6	12.6	10.6
85°	4.8	10.6	11.6	10.6	8.7
87.5°	3.9	9.7	9.7	8.7	5.8
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	7.65	8.97	8.02	9.28	9.60	15.02	16.34	15.38	16.65	16.97
	3H	9.04	10.21	9.42	10.54	10.90	15.25	16.42	15.63	16.75	17.11
	4H	9.59	10.68	9.99	11.03	11.42	15.36	16.45	15.77	16.80	17.19
	6H	10.03	11.03	10.44	11.40	11.79	15.48	16.48	15.89	16.85	17.24
	8H	10.20	11.15	10.63	11.55	11.95	15.53	16.48	15.96	16.87	17.27
	12H	10.36	11.27	10.79	11.65	12.08	15.59	16.50	16.02	16.88	17.31
4H	2H	8.75	9.84	9.15	10.19	10.58	14.98	16.07	15.38	16.42	16.80
	3H	10.41	11.30	10.82	11.71	12.11	15.34	16.23	15.75	16.63	17.04
	4H	11.22	12.02	11.66	12.44	12.88	15.53	16.33	15.97	16.75	17.19
	6H	11.86	12.55	12.32	13.00	13.46	15.76	16.45	16.22	16.90	17.36
	8H	12.10	12.74	12.57	13.19	13.66	15.86	16.51	16.33	16.96	17.43
	12H	12.31	12.88	12.80	13.36	13.84	15.99	16.56	16.48	17.05	17.52
8H	4H	11.66	12.31	12.13	12.76	13.23	15.57	16.22	16.04	16.66	17.13
	6H	12.58	13.11	13.08	13.60	14.09	15.90	16.43	16.40	16.93	17.41
	8H	13.00	13.48	13.52	13.99	14.48	16.09	16.57	16.61	17.08	17.57
	12H	13.42	13.84	13.93	14.33	14.91	16.34	16.76	16.85	17.26	17.83
12H	4H	11.72	12.29	12.21	12.78	13.25	15.56	16.13	16.05	16.61	17.09
	6H	12.71	13.19	13.24	13.71	14.20	15.92	16.39	16.44	16.91	17.40
	8H	13.26	13.68	13.77	14.17	14.74	16.17	16.59	16.69	17.09	17.66