

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: P1059341

Luminaire Tested: S123RDRP-S775D835-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059341
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S775D835-X4F0-XX-UDD-SVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

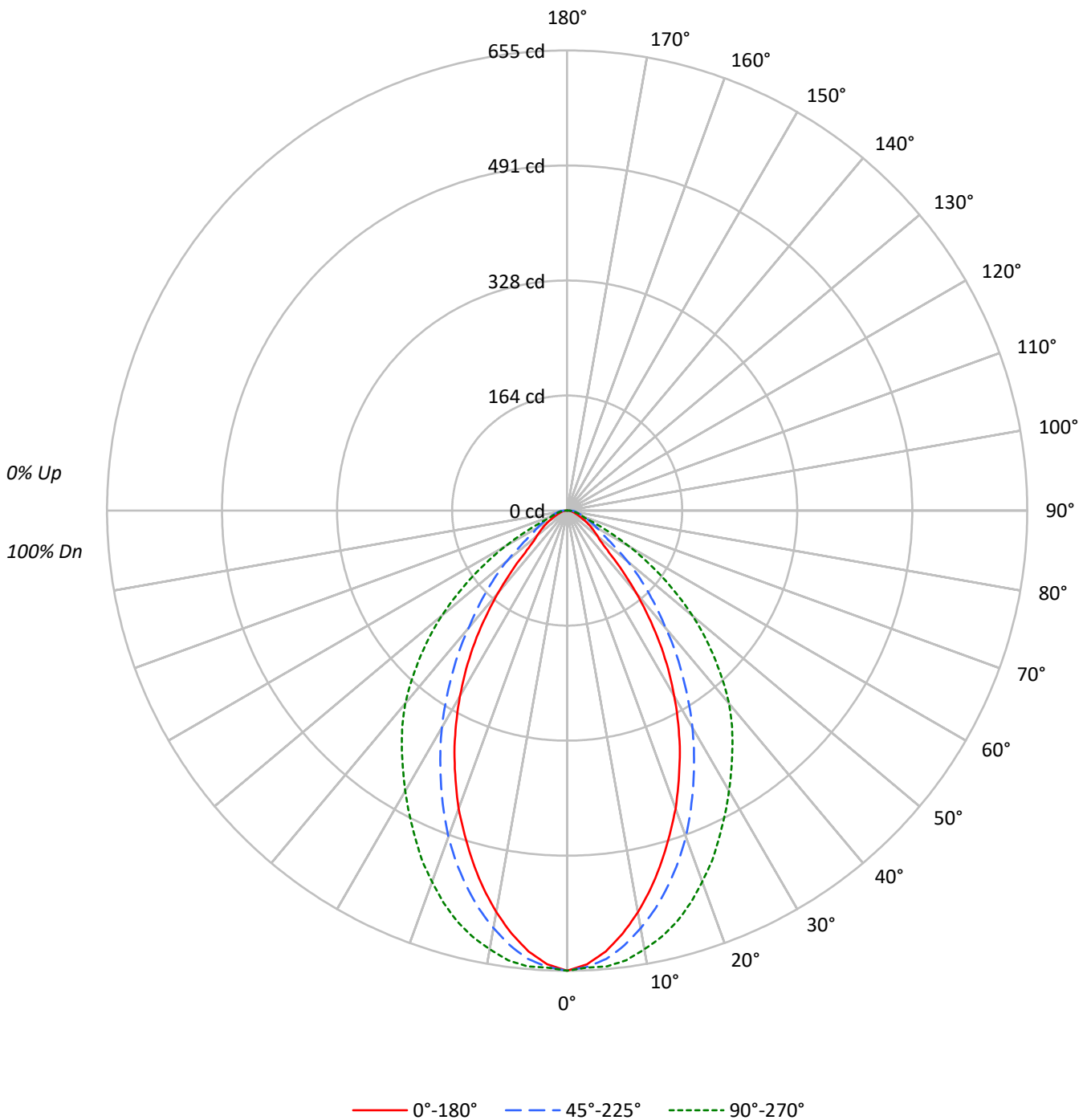
Lumens per Lamp: N/A
Luminaire Lumens: 877.1 lumens
Efficiency: N/A
Efficacy: 34.0 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	101	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	91	81	74	69	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	61	69	64	60	68	63	59	58
6	79	68	61	56	78	67	60	55	66	60	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	56	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	50	43	39	49	43	39	48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7690	7690	7690
5°	7427	7551	7675
10°	6919	7193	7558
15°	6300	6730	7357
20°	5639	6177	7025
25°	4918	5513	6640
30°	4135	4835	6248
35°	3290	4098	5880
40°	2345	3342	5495
45°	1397	2684	4922
50°	1030	2044	4262
55°	862	1390	3386
60°	695	1146	2379
65°	558	984	1275
70°	460	855	786
75°	436	826	740
80°	453	906	710
85°	647	1293	903

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4922 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.2	6.9
10°-20°	156.3	17.8
20°-30°	199.4	22.7
30°-40°	187.6	21.4
40°-50°	134.8	15.4
50°-60°	77.3	8.8
60°-70°	35.3	4.0
70°-80°	17.8	2.0
80°-90°	8.7	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°	415.8	47.4
0°-40°	603.4	68.8
0°-60°	815.4	93.0
0°-90°	877.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	877.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	655	655	655	655	655	
5°	630	642	641	645	651	59
15°	518	536	554	583	605	145
25°	380	397	426	471	512	173
35°	230	246	286	351	410	142
45°	84	102	162	238	296	70
55°	42	43	68	125	165	38
65°	20	28	35	39	46	20
75°	10	19	18	16	16	10
85°	5	10	10	9	7	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	654.9	654.9	654.9	654.9	654.9
2.5°	646.3	655.9	650.1	650.1	651.1
5°	630.1	642.5	640.6	645.4	651.1
7.5°	607.1	620.5	624.3	635.8	645.4
10°	580.3	595.6	603.3	621.5	633.9
12.5°	550.7	567.9	580.3	603.3	621.5
15°	518.2	536.4	553.6	583.2	605.2
17.5°	484.7	502.9	524.9	559.3	585.1
20°	451.3	469.4	494.3	530.6	562.2
22.5°	414.9	433.1	459.9	501.0	539.2
25°	379.6	396.8	425.5	471.4	512.5
27.5°	342.3	359.5	391.0	440.8	486.7
30°	305.0	322.2	356.6	410.2	460.8
32.5°	267.7	284.0	321.2	380.5	435.0
35°	229.5	245.7	285.9	350.9	410.2
37.5°	190.3	206.5	253.4	324.1	385.3
40°	153.0	171.1	218.0	297.3	358.5
42.5°	116.6	135.8	189.3	268.7	327.9
45°	84.1	102.3	161.6	238.1	296.4
47.5°	64.1	73.6	136.7	207.5	265.8
50°	56.4	57.4	111.9	179.7	233.3
52.5°	48.8	49.7	87.0	153.0	198.9
55°	42.1	43.0	67.9	125.2	165.4
57.5°	35.4	37.3	55.5	99.4	132.9
60°	29.6	33.5	48.8	75.5	101.3
62.5°	23.9	30.6	42.1	55.5	72.7
65°	20.1	27.7	35.4	39.2	45.9
67.5°	16.3	25.8	29.6	27.7	27.7
70°	13.4	22.9	24.9	22.9	22.9
72.5°	11.5	22.0	21.0	19.1	19.1
75°	9.6	19.1	18.2	16.3	16.3
77.5°	8.6	16.3	15.3	14.3	13.4
80°	6.7	13.4	13.4	12.4	10.5
82.5°	5.7	11.5	11.5	10.5	8.6
85°	4.8	9.6	9.6	8.6	6.7
87.5°	3.8	8.6	8.6	7.6	4.8
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	7.08	8.39	7.44	8.71	9.02	14.29	15.61	14.66	15.92	16.24
	3H	8.47	9.64	8.85	9.97	10.34	14.53	15.70	14.91	16.03	16.39
	4H	9.04	10.13	9.44	10.48	10.86	14.64	15.73	15.04	16.08	16.46
	6H	9.50	10.50	9.91	10.87	11.26	14.74	15.74	15.16	16.11	16.51
	8H	9.68	10.63	10.11	11.02	11.43	14.79	15.74	15.22	16.13	16.54
	12H	9.87	10.78	10.31	11.16	11.59	14.84	15.75	15.27	16.13	16.56
4H	2H	8.15	9.24	8.55	9.59	9.97	14.25	15.34	14.66	15.70	16.08
	3H	9.84	10.73	10.25	11.13	11.54	14.62	15.51	15.04	15.92	16.32
	4H	10.67	11.47	11.10	11.89	12.33	14.81	15.61	15.24	16.03	16.47
	6H	11.33	12.02	11.79	12.47	12.93	15.03	15.72	15.49	16.17	16.63
	8H	11.58	12.23	12.05	12.68	13.15	15.13	15.77	15.60	16.22	16.69
	12H	11.84	12.41	12.33	12.90	13.37	15.25	15.82	15.73	16.30	16.77
8H	4H	11.11	11.75	11.58	12.20	12.67	14.85	15.50	15.32	15.94	16.42
	6H	12.06	12.59	12.56	13.09	13.57	15.18	15.71	15.69	16.21	16.69
	8H	12.52	13.00	13.05	13.52	14.01	15.37	15.85	15.89	16.36	16.86
	12H	13.01	13.43	13.52	13.92	14.49	15.61	16.03	16.12	16.52	17.09
12H	4H	11.17	11.74	11.65	12.22	12.69	14.85	15.42	15.33	15.90	16.37
	6H	12.21	12.69	12.73	13.20	13.69	15.21	15.69	15.73	16.20	16.69
	8H	12.80	13.22	13.32	13.72	14.29	15.47	15.89	15.98	16.39	16.96