

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: P1059343

Luminaire Tested: S123RDRP-S775D835-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059343
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-28)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S775D835-X4F0-XX-UDD-WVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

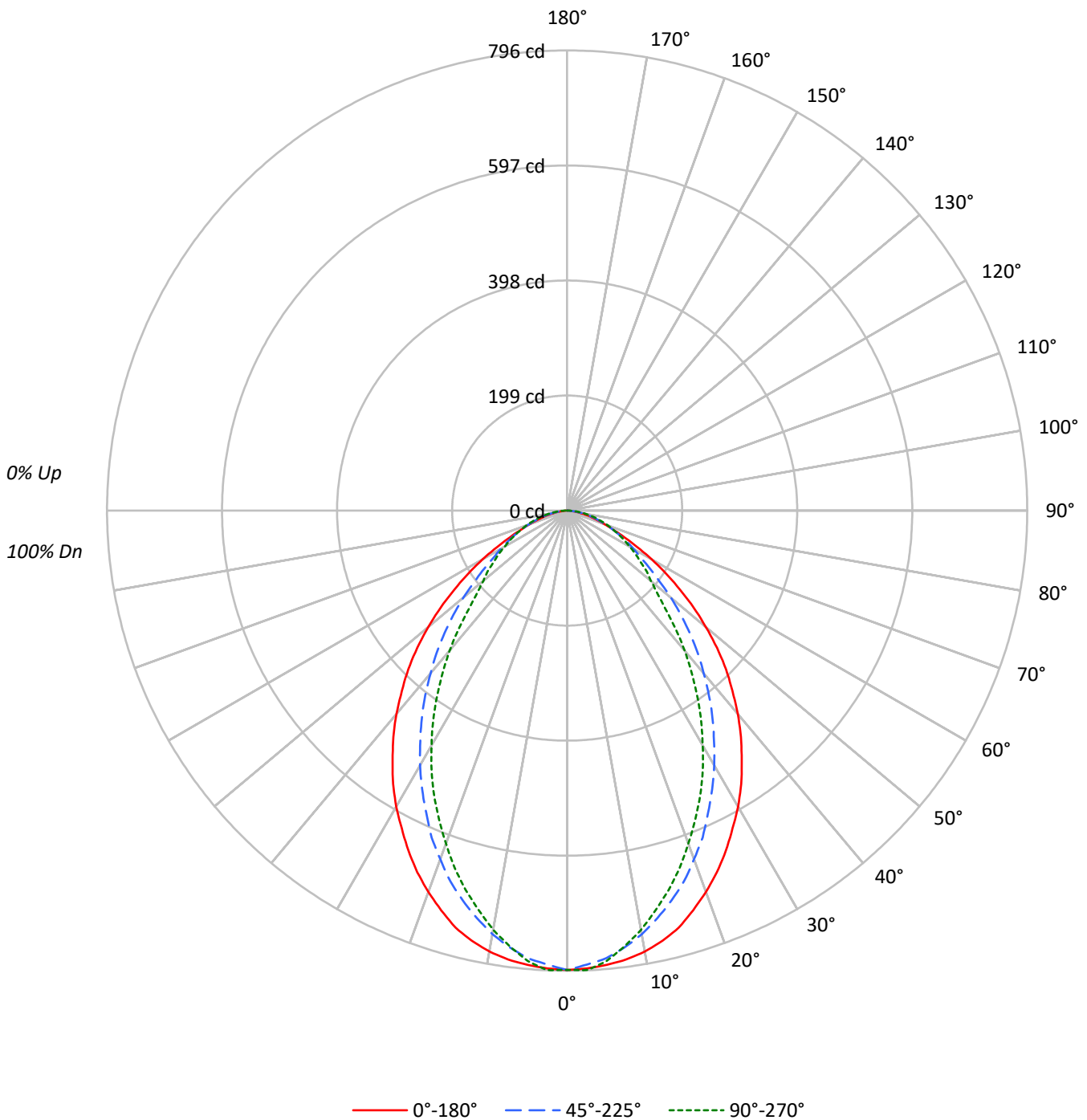
Lumens per Lamp: N/A
Luminaire Lumens: 1389.8 lumens
Efficiency: N/A
Efficacy: 53.9 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	88
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9331	9331	9331
5°	9299	9163	9220
10°	9236	8871	8781
15°	9080	8487	8254
20°	8772	8020	7661
25°	8414	7475	7053
30°	8016	6902	6358
35°	7543	6284	5626
40°	7042	5636	4845
45°	6455	4980	3981
50°	5723	4275	3454
55°	4868	3579	3167
60°	3969	3119	2938
65°	3026	2759	2734
70°	2362	2458	2558
75°	1906	2209	2382
80°	1420	1806	2198
85°	768	1159	1927

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6455 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.8	5.3
10°-20°	198.4	14.3
20°-30°	269.8	19.4
30°-40°	279.7	20.1
40°-50°	235.9	17.0
50°-60°	167.4	12.0
60°-70°	102.3	7.4
70°-80°	50.9	3.7
80°-90°	11.6	0.8
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°	542.0	39.0
0°-40°	821.7	59.1
0°-60°	1225.0	88.1
0°-90°	1389.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1389.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	795	795	795	795	795	
5°	789	789	777	782	782	75
15°	747	732	698	686	679	210
25°	649	621	577	556	544	299
35°	526	486	438	408	392	329
45°	389	348	300	259	240	298
55°	238	213	175	160	155	214
65°	109	105	99	99	98	111
75°	42	45	49	51	52	45
85°	6	7	9	12	14	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	794.6	794.6	794.6	794.6	794.6
2.5°	792.7	793.7	786.0	794.6	795.6
5°	788.9	788.9	777.4	782.2	782.2
7.5°	783.2	781.2	762.1	762.1	760.2
10°	774.6	768.8	744.0	739.2	736.4
12.5°	762.1	752.6	722.0	713.4	707.7
15°	746.9	732.5	698.1	685.7	679.0
17.5°	724.9	710.6	672.4	655.2	647.5
20°	702.0	681.0	641.8	624.6	613.1
22.5°	677.1	650.4	612.2	591.2	578.8
25°	649.4	620.8	576.9	555.8	544.4
27.5°	619.8	588.3	543.4	519.6	508.1
30°	591.2	554.9	509.0	482.3	468.9
32.5°	560.6	519.6	472.8	445.1	431.7
35°	526.2	486.1	438.4	407.8	392.5
37.5°	493.8	452.7	403.0	370.6	353.4
40°	459.4	418.3	367.7	334.3	316.1
42.5°	423.1	383.9	334.3	295.1	277.9
45°	388.7	347.6	299.9	258.8	239.7
47.5°	351.5	313.3	266.5	224.4	211.1
50°	313.3	277.9	234.0	195.8	189.1
52.5°	276.0	246.4	201.5	176.7	173.8
55°	237.8	213.0	174.8	159.5	154.7
57.5°	202.5	184.3	149.9	142.3	140.4
60°	169.0	153.8	132.8	128.0	125.1
62.5°	136.6	128.0	115.6	113.7	111.7
65°	108.9	105.1	99.3	99.3	98.4
67.5°	86.0	86.0	85.0	86.9	86.0
70°	68.8	69.7	71.6	73.5	74.5
72.5°	54.4	57.3	59.2	62.1	63.0
75°	42.0	44.9	48.7	50.6	52.5
77.5°	30.6	33.4	37.2	40.1	42.0
80°	21.0	22.9	26.7	30.6	32.5
82.5°	13.4	14.3	17.2	21.0	22.9
85°	5.7	6.7	8.6	12.4	14.3
87.5°	0.0	0.0	1.0	3.8	6.7
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	16.57	18.02	16.93	18.33	18.65	14.67	16.12	15.03	16.43	16.74
	3H	17.47	18.76	17.84	19.09	19.45	16.24	17.53	16.62	17.86	18.23
	4H	17.75	18.96	18.15	19.31	19.69	16.83	18.05	17.23	18.40	18.78
	6H	17.90	19.02	18.31	19.38	19.78	17.28	18.40	17.70	18.77	19.16
	8H	17.92	18.98	18.35	19.37	19.78	17.43	18.50	17.86	18.89	19.29
	12H	17.91	18.93	18.35	19.31	19.74	17.53	18.55	17.96	18.93	19.36
4H	2H	16.81	18.02	17.21	18.37	18.75	15.21	16.42	15.61	16.77	17.15
	3H	17.93	18.93	18.34	19.33	19.73	16.98	17.98	17.39	18.38	18.78
	4H	18.32	19.21	18.75	19.63	20.07	17.69	18.59	18.12	19.01	19.45
	6H	18.56	19.34	19.02	19.78	20.24	18.26	19.04	18.72	19.49	19.95
	8H	18.60	19.33	19.07	19.77	20.24	18.45	19.18	18.92	19.63	20.10
	12H	18.61	19.26	19.09	19.74	20.21	18.59	19.24	19.08	19.72	20.19
8H	4H	18.47	19.20	18.94	19.65	20.11	17.90	18.63	18.37	19.07	19.54
	6H	18.79	19.38	19.28	19.88	20.36	18.58	19.17	19.08	19.67	20.15
	8H	18.86	19.40	19.38	19.91	20.40	18.83	19.37	19.35	19.88	20.37
	12H	18.90	19.37	19.41	19.86	20.43	19.04	19.52	19.55	20.01	20.58
12H	4H	18.48	19.12	18.96	19.60	20.08	17.90	18.55	18.38	19.03	19.50
	6H	18.80	19.34	19.32	19.85	20.34	18.59	19.12	19.10	19.63	20.12
	8H	18.91	19.39	19.43	19.88	20.45	18.89	19.36	19.40	19.86	20.42