

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: P1059385

Luminaire Tested: S123RDRP-S775D935-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059385
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S775D935-X4F0-XX-UDD-SVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

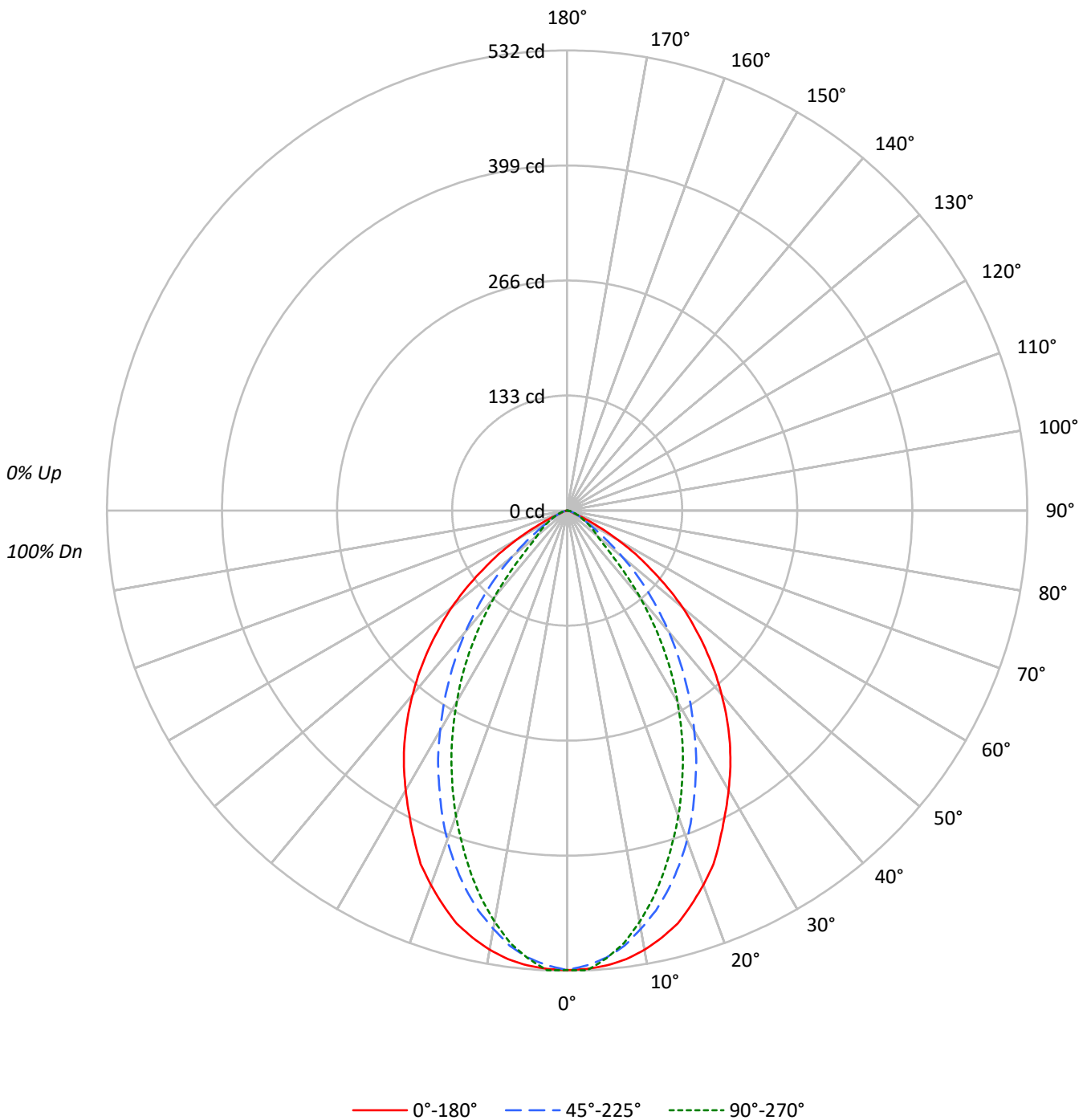
Lumens per Lamp: N/A
Luminaire Lumens: 685.8 lumens
Efficiency: N/A
Efficacy: 26.6 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6238	6238	6238
5°	6223	6116	6126
10°	6148	5853	5756
15°	6008	5508	5258
20°	5754	5066	4696
25°	5424	4539	4102
30°	5062	3981	3456
35°	4703	3394	2782
40°	4260	2799	2017
45°	3755	2170	1216
50°	3184	1518	826
55°	2424	909	690
60°	1583	580	540
65°	661	433	433
70°	227	309	340
75°	186	222	263
80°	108	169	223
85°	108	108	216

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3755 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.1	7.2
10°-20°	128.4	18.7
20°-30°	164.7	24.0
30°-40°	154.5	22.5
40°-50°	107.8	15.7
50°-60°	55.7	8.1
60°-70°	19.0	2.8
70°-80°	5.4	0.8
80°-90°	1.1	0.2
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°	342.1	49.9
0°-40°	496.6	72.4
0°-60°	660.1	96.3
0°-90°	685.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	685.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	531	531	531	531	531	
5°	528	527	519	521	520	50
15°	494	482	453	438	432	139
25°	419	392	350	326	317	192
35°	328	288	237	206	194	204
45°	226	185	131	90	73	174
55°	118	89	44	34	34	107
65°	24	21	16	15	16	28
75°	4	4	5	6	6	4
85°	1	1	1	1	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	531.2	531.2	531.2	531.2	531.2
2.5°	530.4	531.2	526.3	531.2	532.0
5°	527.9	527.1	518.9	521.4	519.7
7.5°	523.0	520.5	507.4	504.1	504.1
10°	515.6	510.7	490.9	485.2	482.7
12.5°	505.7	499.1	473.7	463.0	458.9
15°	494.2	481.9	453.1	438.3	432.5
17.5°	477.8	461.3	430.1	412.8	403.8
20°	460.5	439.9	405.4	384.8	375.8
22.5°	442.4	417.7	378.3	356.1	346.2
25°	418.6	392.2	350.3	326.5	316.6
27.5°	395.5	367.6	323.2	296.0	286.2
30°	373.3	340.4	293.6	267.3	254.9
32.5°	351.1	314.1	265.6	236.8	225.3
35°	328.1	287.8	236.8	206.4	194.1
37.5°	303.4	262.3	209.7	176.8	162.0
40°	277.9	235.2	182.6	145.6	131.6
42.5°	252.5	210.5	155.4	117.6	101.1
45°	226.1	185.0	130.7	90.5	73.2
47.5°	199.8	159.5	106.9	65.8	55.1
50°	174.3	135.7	83.1	48.5	45.2
52.5°	146.4	112.7	62.5	40.3	39.5
55°	118.4	88.8	44.4	34.5	33.7
57.5°	93.7	69.1	32.1	28.8	28.0
60°	67.4	49.3	24.7	23.8	23.0
62.5°	44.4	33.7	19.7	18.9	18.9
65°	23.8	20.6	15.6	14.8	15.6
67.5°	9.9	11.5	11.5	12.3	12.3
70°	6.6	7.4	9.0	9.9	9.9
72.5°	4.9	5.8	6.6	7.4	7.4
75°	4.1	4.1	4.9	5.8	5.8
77.5°	2.5	3.3	3.3	4.1	4.9
80°	1.6	2.5	2.5	3.3	3.3
82.5°	0.8	1.6	1.6	2.5	2.5
85°	0.8	0.8	0.8	0.8	1.6
87.5°	0.0	0.0	0.0	0.0	0.8
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	12.69	13.95	13.06	14.27	14.58	6.20	7.46	6.57	7.77	8.09
	3H	12.65	13.76	13.03	14.09	14.45	6.98	8.08	7.36	8.42	8.78
	4H	12.59	13.62	13.00	13.98	14.36	7.18	8.21	7.58	8.56	8.95
	6H	12.52	13.47	12.94	13.84	14.23	7.32	8.27	7.74	8.64	9.03
	8H	12.48	13.37	12.91	13.76	14.17	7.36	8.25	7.79	8.64	9.05
	12H	12.44	13.29	12.87	13.67	14.10	7.38	8.23	7.81	8.61	9.04
4H	2H	12.54	13.57	12.94	13.92	14.31	6.46	7.49	6.86	7.84	8.22
	3H	12.53	13.36	12.94	13.77	14.17	7.36	8.20	7.78	8.60	9.01
	4H	12.47	13.22	12.91	13.64	14.08	7.64	8.38	8.08	8.80	9.25
	6H	12.42	13.05	12.88	13.50	13.97	7.86	8.49	8.32	8.94	9.41
	8H	12.36	12.96	12.83	13.41	13.88	7.92	8.51	8.39	8.96	9.43
	12H	12.32	12.84	12.81	13.33	13.80	7.96	8.48	8.44	8.96	9.44
8H	4H	12.36	12.96	12.83	13.40	13.88	7.62	8.22	8.09	8.67	9.14
	6H	12.30	12.78	12.80	13.28	13.76	7.89	8.38	8.40	8.87	9.36
	8H	12.25	12.68	12.77	13.20	13.69	8.00	8.44	8.53	8.95	9.45
	12H	12.21	12.59	12.73	13.09	13.66	8.07	8.46	8.59	8.95	9.53
12H	4H	12.31	12.84	12.80	13.32	13.80	7.59	8.11	8.07	8.59	9.07
	6H	12.24	12.68	12.77	13.19	13.69	7.85	8.29	8.38	8.81	9.30
	8H	12.21	12.59	12.73	13.09	13.66	7.99	8.38	8.51	8.88	9.45