

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: P1059382

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059382
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S775D935-X4F0-XX-UDD-BVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

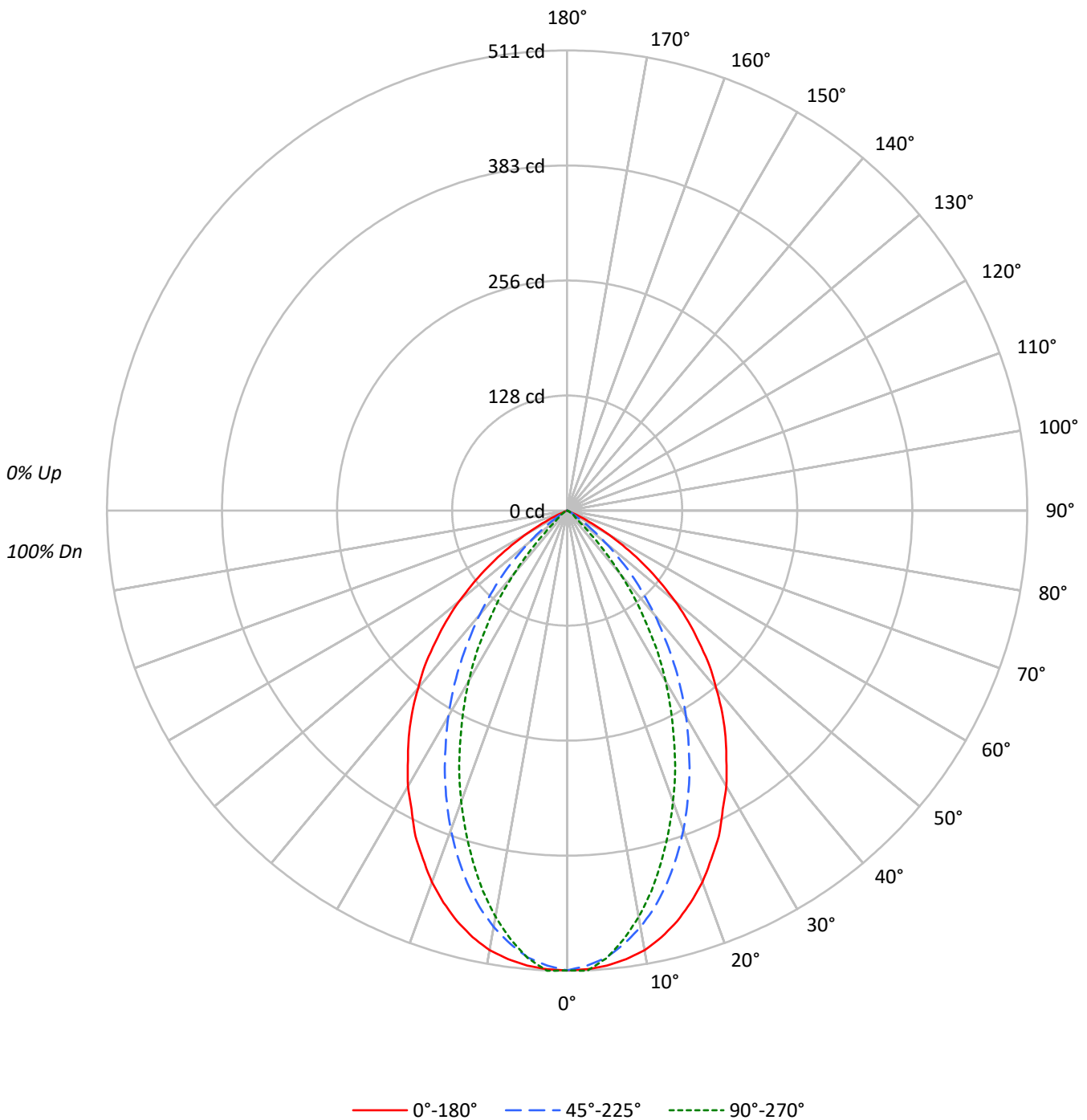
Lumens per Lamp: N/A
Luminaire Lumens: 582.7 lumens
Efficiency: N/A
Efficacy: 22.6 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47	46
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5996	5996	5996
5°	5980	5874	5883
10°	5912	5598	5461
15°	5738	5208	4908
20°	5487	4716	4295
25°	5167	4165	3633
30°	4794	3578	2965
35°	4397	2959	2205
40°	3946	2319	1412
45°	3441	1694	588
50°	2853	1007	225
55°	2105	422	168
60°	1275	155	96
65°	342	92	44
70°	0	27	27
75°	0	0	36
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3441 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.0	8.1
10°-20°	121.3	20.8
20°-30°	151.2	25.9
30°-40°	135.2	23.2
40°-50°	85.3	14.6
50°-60°	35.7	6.1
60°-70°	6.7	1.1
70°-80°	0.2	0.0
80°-90°	0.0	0.0
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°	319.5	54.8
0°-40°	454.7	78.0
0°-60°	575.7	98.8
0°-90°	582.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	582.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	511	511	511	511	511	
5°	507	506	498	500	499	48
15°	472	460	428	410	404	132
25°	399	367	322	294	280	183
35°	307	262	206	169	154	191
45°	207	161	102	54	35	160
55°	103	71	21	8	8	92
65°	12	9	3	2	2	17
75°	0	0	0	0	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	510.6	510.6	510.6	510.6	510.6
2.5°	509.8	510.6	505.7	510.6	511.4
5°	507.3	506.5	498.3	499.9	499.1
7.5°	502.4	499.9	485.1	481.8	480.2
10°	495.8	489.2	469.5	461.3	458.0
12.5°	485.1	476.1	450.6	437.4	432.5
15°	472.0	460.5	428.4	410.3	403.7
17.5°	456.4	439.9	403.7	384.0	374.1
20°	439.1	416.1	377.4	353.6	343.7
22.5°	418.5	393.0	349.5	324.0	313.3
25°	398.8	366.7	321.5	293.5	280.4
27.5°	374.1	340.4	291.9	263.1	249.1
30°	353.6	314.9	263.9	231.9	218.7
32.5°	328.9	288.6	235.2	199.8	187.5
35°	306.7	262.3	206.4	169.4	153.8
37.5°	282.9	236.8	177.6	139.0	124.2
40°	257.4	211.3	151.3	108.5	92.1
42.5°	234.3	185.8	125.0	80.6	64.1
45°	207.2	161.2	102.0	54.3	35.4
47.5°	182.5	138.1	77.3	30.4	18.9
50°	156.2	114.3	55.1	15.6	12.3
52.5°	129.1	91.3	36.2	10.7	9.9
55°	102.8	70.7	20.6	8.2	8.2
57.5°	77.3	51.0	10.7	6.6	5.8
60°	54.3	33.7	6.6	4.9	4.1
62.5°	31.2	19.7	4.9	3.3	3.3
65°	12.3	9.0	3.3	1.6	1.6
67.5°	0.8	2.5	1.6	0.8	0.8
70°	0.0	0.0	0.8	0.8	0.8
72.5°	0.0	0.0	0.8	0.8	0.8
75°	0.0	0.0	0.0	0.0	0.8
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	11.42	12.59	11.78	12.90	13.22	0.00	0.00	0.00	0.00	0.00
	3H	11.26	12.29	11.64	12.62	12.99	0.00	0.00	0.00	0.00	0.00
	4H	11.17	12.12	11.57	12.48	12.86	0.00	0.00	0.00	0.00	0.00
	6H	11.08	11.95	11.49	12.32	12.72	0.00	0.00	0.00	0.00	0.00
	8H	11.03	11.85	11.46	12.24	12.65	0.00	0.00	0.00	0.00	0.00
	12H	10.98	11.76	11.41	12.15	12.58	0.00	0.00	0.00	0.00	0.00
4H	2H	11.17	12.13	11.58	12.48	12.87	0.00	0.00	0.00	0.00	0.00
	3H	11.01	11.78	11.42	12.18	12.59	0.00	0.00	0.00	0.00	0.00
	4H	10.91	11.59	11.34	12.01	12.46	0.00	0.00	0.00	0.00	0.00
	6H	10.81	11.39	11.28	11.84	12.31	0.00	0.00	0.00	0.00	0.00
	8H	10.74	11.29	11.22	11.74	12.21	0.00	0.00	0.00	0.00	0.00
	12H	10.69	11.16	11.18	11.65	12.13	0.00	0.00	0.00	0.00	0.00
8H	4H	10.74	11.29	11.22	11.74	12.21	0.00	0.00	0.00	0.00	0.00
	6H	10.63	11.07	11.13	11.57	12.05	0.00	0.00	0.00	0.00	0.00
	8H	10.56	10.95	11.08	11.47	11.97	0.00	0.00	0.00	0.00	0.00
	12H	10.50	10.85	11.02	11.35	11.92	0.00	0.00	0.00	0.00	0.00
12H	4H	10.69	11.16	11.18	11.65	12.13	0.00	0.00	0.00	0.00	0.00
	6H	10.56	10.95	11.08	11.47	11.97	0.00	0.00	0.00	0.00	0.00
	8H	10.50	10.85	11.02	11.35	11.92	0.00	0.00	0.00	0.00	0.00