

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: P1059400

Luminaire Tested: S123RDRP-S775D950-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059400
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-S775D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

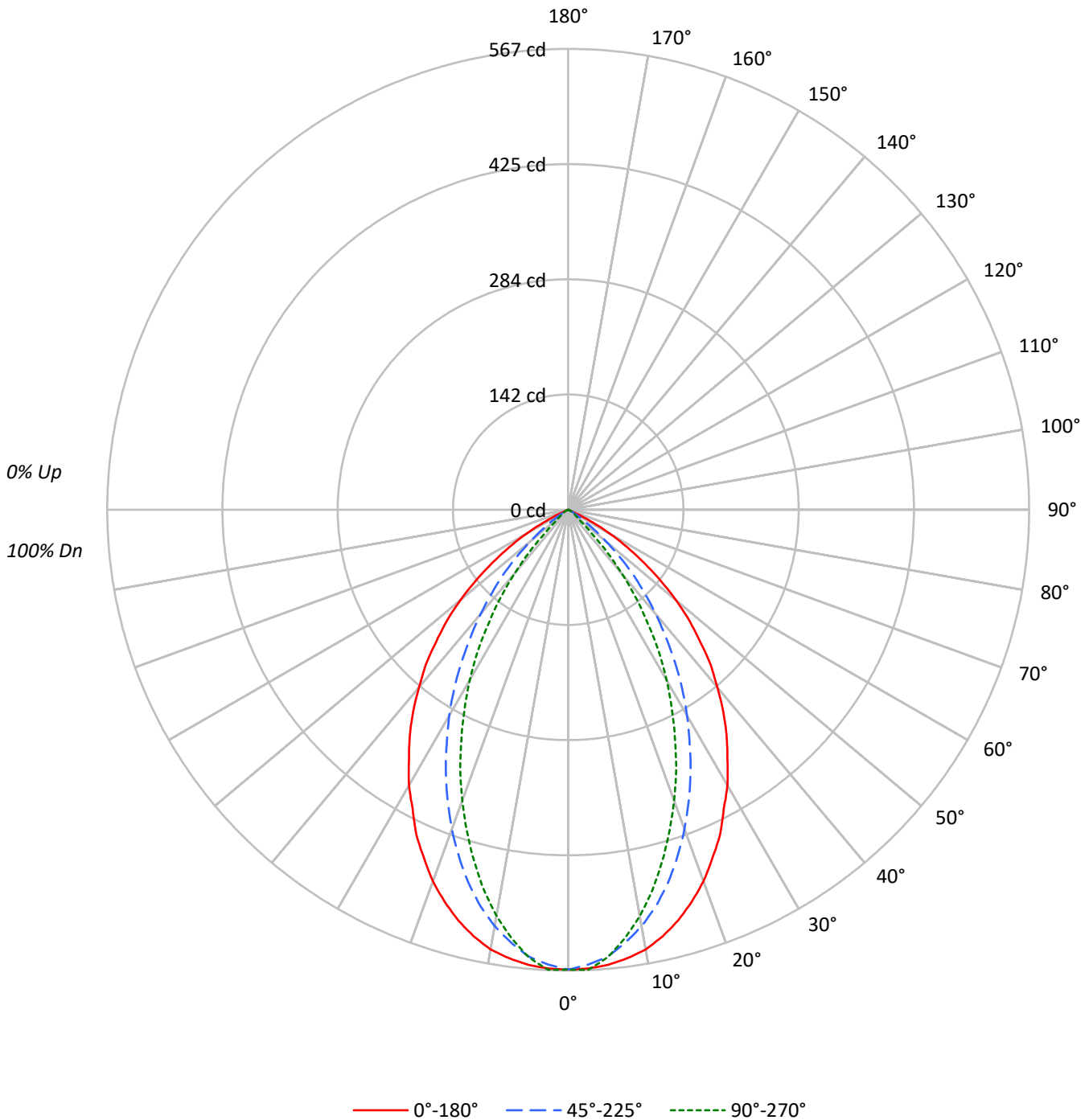
Lumens per Lamp: N/A
Luminaire Lumens: 645.6 lumens
Efficiency: N/A
Efficacy: 25.0 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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°	6644	6644	6644
5°	6626	6508	6518
10°	6551	6203	6051
15°	6358	5771	5438
20°	6079	5226	4758
25°	5725	4615	4026
30°	5312	3966	3285
35°	4871	3278	2443
40°	4372	2569	1564
45°	3813	1877	651
50°	3162	1114	250
55°	2332	467	186
60°	1411	171	108
65°	381	100	50
70°	0	31	31
75°	0	0	41
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3813 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.1	8.1
10°-20°	134.4	20.8
20°-30°	167.5	25.9
30°-40°	149.8	23.2
40°-50°	94.5	14.6
50°-60°	39.6	6.1
60°-70°	7.4	1.2
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°	354.0	54.8
0°-40°	503.8	78.0
0°-60°	637.9	98.8
0°-90°	645.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	645.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	566	566	566	566	566	
5°	562	561	552	554	553	53
15°	523	510	475	455	447	147
25°	442	406	356	325	311	202
35°	340	291	229	188	170	212
45°	230	179	113	60	39	177
55°	114	78	23	9	9	102
65°	14	10	4	2	2	19
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°	565.8	565.8	565.8	565.8	565.8
2.5°	564.9	565.8	560.3	565.8	566.7
5°	562.1	561.2	552.1	553.9	553.0
7.5°	556.7	553.9	537.5	533.9	532.1
10°	549.4	542.1	520.2	511.1	507.5
12.5°	537.5	527.5	499.3	484.7	479.2
15°	523.0	510.2	474.7	454.6	447.3
17.5°	505.6	487.4	447.3	425.5	414.5
20°	486.5	461.0	418.2	391.8	380.8
22.5°	463.7	435.5	387.2	359.0	347.1
25°	441.9	406.3	356.2	325.3	310.7
27.5°	414.5	377.2	323.4	291.5	276.1
30°	391.8	348.9	292.5	256.9	242.3
32.5°	364.4	319.8	260.6	221.4	207.7
35°	339.8	290.6	228.7	187.7	170.4
37.5°	313.4	262.4	196.8	154.0	137.6
40°	285.2	234.1	167.6	120.3	102.0
42.5°	259.7	205.9	138.5	89.3	71.1
45°	229.6	178.6	113.0	60.1	39.2
47.5°	202.3	153.1	85.6	33.7	21.0
50°	173.1	126.6	61.0	17.3	13.7
52.5°	143.0	101.1	40.1	11.8	10.9
55°	113.9	78.4	22.8	9.1	9.1
57.5°	85.6	56.5	11.8	7.3	6.4
60°	60.1	37.4	7.3	5.5	4.6
62.5°	34.6	21.9	5.5	3.6	3.6
65°	13.7	10.0	3.6	1.8	1.8
67.5°	0.9	2.7	1.8	0.9	0.9
70°	0.0	0.0	0.9	0.9	0.9
72.5°	0.0	0.0	0.9	0.9	0.9
75°	0.0	0.0	0.0	0.0	0.9
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	11.77	12.95	12.14	13.26	13.57	0.00	0.00	0.00	0.00	0.00
	3H	11.61	12.64	11.99	12.97	13.34	0.00	0.00	0.00	0.00	0.00
	4H	11.52	12.48	11.93	12.83	13.22	0.00	0.00	0.00	0.00	0.00
	6H	11.43	12.30	11.85	12.68	13.07	0.00	0.00	0.00	0.00	0.00
	8H	11.38	12.20	11.82	12.60	13.00	0.00	0.00	0.00	0.00	0.00
	12H	11.33	12.12	11.77	12.50	12.93	0.00	0.00	0.00	0.00	0.00
4H	2H	11.53	12.48	11.93	12.84	13.22	0.00	0.00	0.00	0.00	0.00
	3H	11.36	12.13	11.78	12.54	12.94	0.00	0.00	0.00	0.00	0.00
	4H	11.26	11.94	11.70	12.36	12.81	0.00	0.00	0.00	0.00	0.00
	6H	11.16	11.75	11.63	12.20	12.67	0.00	0.00	0.00	0.00	0.00
	8H	11.10	11.64	11.57	12.09	12.57	0.00	0.00	0.00	0.00	0.00
	12H	11.04	11.52	11.53	12.00	12.48	0.00	0.00	0.00	0.00	0.00
8H	4H	11.10	11.64	11.57	12.09	12.57	0.00	0.00	0.00	0.00	0.00
	6H	10.98	11.42	11.49	11.92	12.41	0.00	0.00	0.00	0.00	0.00
	8H	10.91	11.31	11.44	11.83	12.32	0.00	0.00	0.00	0.00	0.00
	12H	10.86	11.21	11.37	11.70	12.28	0.00	0.00	0.00	0.00	0.00
12H	4H	11.04	11.52	11.53	12.00	12.48	0.00	0.00	0.00	0.00	0.00
	6H	10.91	11.31	11.44	11.83	12.32	0.00	0.00	0.00	0.00	0.00
	8H	10.86	11.21	11.37	11.70	12.28	0.00	0.00	0.00	0.00	0.00