

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: P1055681

Luminaire Tested: S123R3DRP-S775D950-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1055681
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-6)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123R3DRP-S775D950-X4F0-XX-UDD-F-S
Description: DEFINE 3, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

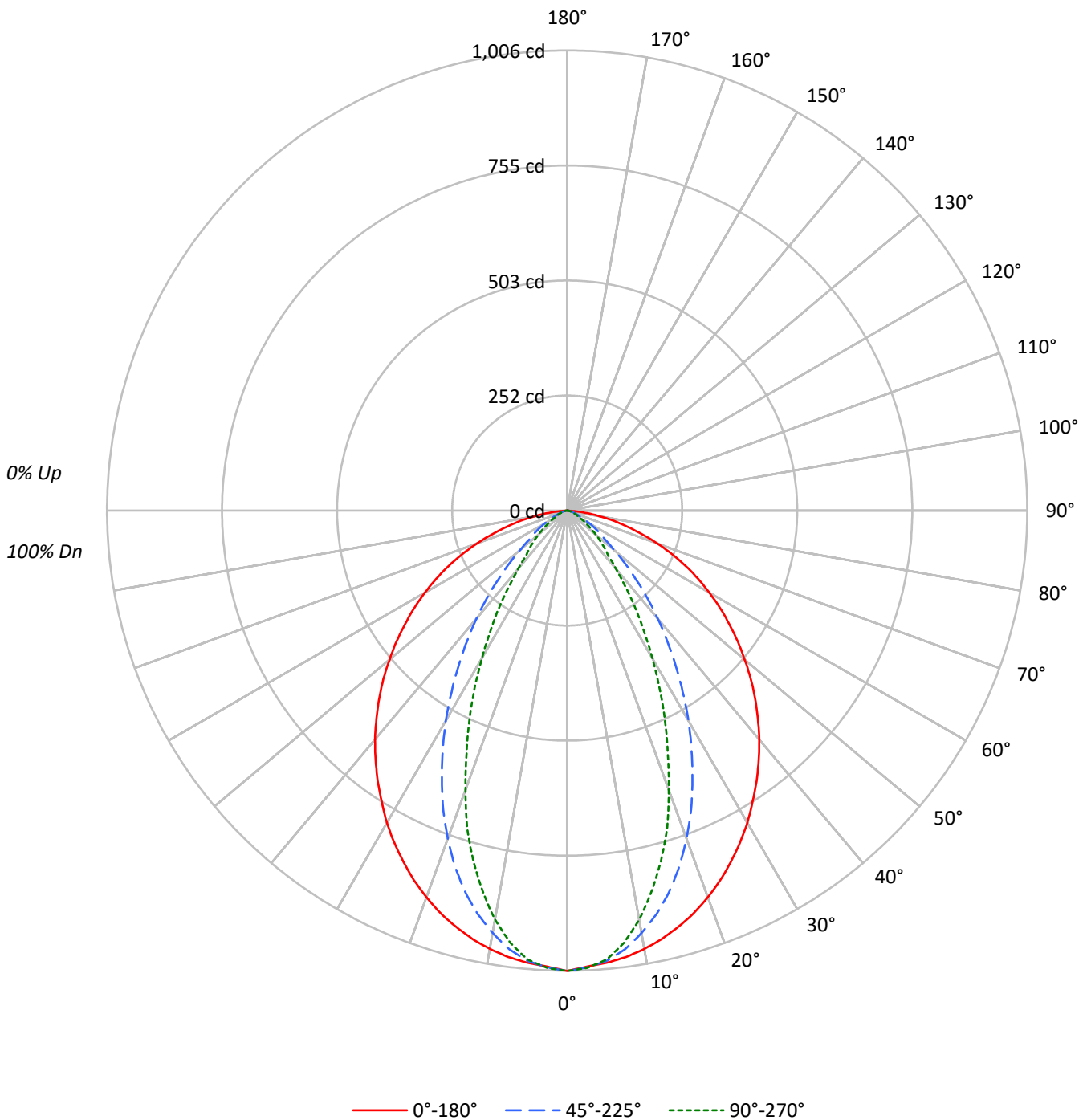
Lumens per Lamp: N/A
Luminaire Lumens: 1399.7 lumens
Efficiency: N/A
Efficacy: 53.0 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.77 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
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	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					100			
1	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89					89			
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79					79			
3	96	88	81	76	94	86	80	76	84	78	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62					62			
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56					56			
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51					51			
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46					46			
8	69	57	50	45	68	57	50	45	56	49	45	54	49	44	53	48	44	42					42			
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39					39			
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12135	12135	12135
5°	12008	11961	11927
10°	11913	11481	11119
15°	11753	10764	9895
20°	11542	9792	8336
25°	11270	8618	6726
30°	10970	7384	5180
35°	10629	6093	3833
40°	10285	4849	2613
45°	9906	3627	1968
50°	9502	2523	1538
55°	9085	1846	1122
60°	8649	1379	805
65°	8136	924	625
70°	7364	673	504
75°	6354	489	401
80°	5103	396	333
85°	2642	401	263

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9906 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.0	6.6
10°-20°	242.2	17.3
20°-30°	304.3	21.7
30°-40°	283.4	20.2
40°-50°	216.9	15.5
50°-60°	144.2	10.3
60°-70°	77.7	5.6
70°-80°	31.8	2.3
80°-90°	6.1	0.4
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°	639.5	45.7
0°-40°	922.9	65.9
0°-60°	1284.0	91.7
0°-90°	1399.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1399.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	992	1003	988	984	986	94
15°	942	926	862	812	793	265
25°	847	790	648	540	506	390
35°	722	615	414	293	260	452
45°	581	429	213	125	115	448
55°	432	250	88	61	53	387
65°	285	96	32	24	22	282
75°	136	23	10	10	9	146
85°	19	3	3	3	2	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1006.5	1006.5	1006.5	1006.5	1006.5
2.5°	997.9	1010.3	999.8	1000.7	1000.7
5°	992.2	1002.7	988.3	984.5	985.5
7.5°	984.5	991.2	967.4	955.0	953.0
10°	973.1	975.0	937.8	915.8	908.2
12.5°	958.8	952.1	903.4	867.2	852.9
15°	941.6	926.3	862.4	811.9	792.8
17.5°	922.5	896.8	815.7	749.8	726.9
20°	899.6	863.4	763.2	681.2	649.7
22.5°	874.8	828.1	707.9	610.6	575.3
25°	847.2	789.9	647.8	540.0	505.6
27.5°	818.5	748.9	588.6	473.2	437.9
30°	788.0	706.9	530.4	408.3	372.1
32.5°	754.6	661.1	470.3	348.2	312.0
35°	722.2	615.3	414.0	292.9	260.4
37.5°	687.8	569.5	359.7	244.2	208.0
40°	653.5	522.8	308.1	196.5	166.0
42.5°	617.2	476.0	259.5	156.5	132.6
45°	581.0	429.3	212.7	125.0	115.4
47.5°	544.7	382.6	171.7	107.8	98.3
50°	506.6	337.7	134.5	91.6	82.0
52.5°	470.3	292.9	104.9	75.4	66.8
55°	432.2	249.9	87.8	61.1	53.4
57.5°	396.9	206.1	72.5	47.7	42.0
60°	358.7	166.9	57.2	37.2	33.4
62.5°	322.5	130.7	43.9	29.6	26.7
65°	285.2	96.4	32.4	23.8	21.9
67.5°	248.0	69.6	24.8	19.1	18.1
70°	208.9	52.5	19.1	15.3	14.3
72.5°	171.7	37.2	14.3	12.4	11.4
75°	136.4	22.9	10.5	9.5	8.6
77.5°	104.9	13.4	7.6	7.6	6.7
80°	73.5	7.6	5.7	5.7	4.8
82.5°	44.8	4.8	3.8	3.8	3.8
85°	19.1	2.9	2.9	2.9	1.9
87.5°	2.9	1.0	1.0	1.0	1.0
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	18.49	19.84	18.85	20.15	20.47	7.06	8.42	7.42	8.73	9.04
	3H	20.24	21.44	20.62	21.77	22.14	7.72	8.93	8.10	9.26	9.62
	4H	20.94	22.06	21.34	22.41	22.79	7.92	9.04	8.32	9.39	9.77
	6H	21.45	22.48	21.87	22.85	23.25	8.04	9.07	8.45	9.44	9.84
	8H	21.59	22.57	22.02	22.96	23.37	8.07	9.05	8.50	9.44	9.85
	12H	21.64	22.58	22.07	22.96	23.39	8.08	9.02	8.52	9.40	9.83
4H	2H	18.29	19.42	18.70	19.77	20.15	7.61	8.74	8.02	9.09	9.47
	3H	20.09	21.01	20.50	21.41	21.81	8.41	9.33	8.83	9.74	10.14
	4H	20.78	21.60	21.21	22.02	22.46	8.67	9.49	9.11	9.91	10.35
	6H	21.35	22.06	21.81	22.51	22.97	8.87	9.58	9.33	10.02	10.49
	8H	21.53	22.19	21.99	22.64	23.11	8.92	9.58	9.39	10.03	10.50
	12H	21.61	22.20	22.10	22.68	23.15	8.95	9.54	9.44	10.02	10.50
8H	4H	20.66	21.32	21.13	21.77	22.24	8.98	9.65	9.45	10.09	10.56
	6H	21.21	21.75	21.71	22.25	22.73	9.23	9.77	9.73	10.27	10.75
	8H	21.39	21.87	21.91	22.39	22.88	9.32	9.80	9.84	10.32	10.81
	12H	21.49	21.92	22.01	22.41	22.99	9.40	9.83	9.91	10.32	10.89
12H	4H	20.61	21.20	21.10	21.68	22.16	9.03	9.61	9.51	10.10	10.57
	6H	21.15	21.64	21.67	22.15	22.64	9.28	9.76	9.80	10.28	10.77
	8H	21.35	21.78	21.86	22.27	22.84	9.40	9.83	9.92	10.33	10.90