

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: P1059394

Luminaire Tested: S123RDRP-S775D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059394
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-S775D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

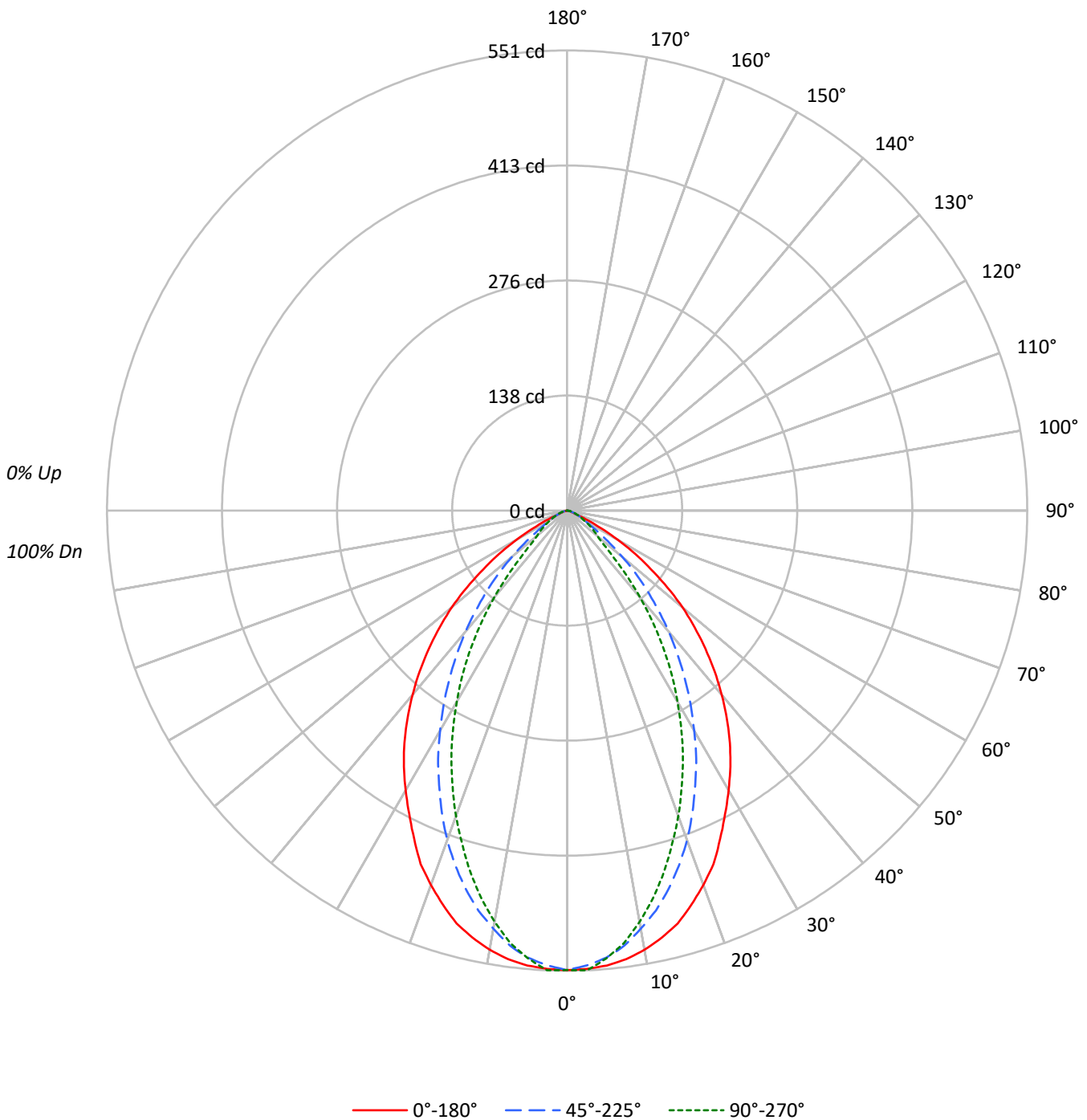
Lumens per Lamp: N/A
Luminaire Lumens: 710.3 lumens
Efficiency: N/A
Efficacy: 27.5 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	70	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	48	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°	6461	6461	6461
5°	6445	6334	6344
10°	6367	6062	5961
15°	6222	5705	5446
20°	5959	5247	4863
25°	5617	4701	4248
30°	5243	4122	3580
35°	4871	3516	2881
40°	4413	2899	2089
45°	3889	2248	1259
50°	3299	1571	855
55°	2510	942	714
60°	1639	599	559
65°	686	450	450
70°	233	323	350
75°	195	231	272
80°	115	176	230
85°	121	121	229

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3889 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.8	7.2
10°-20°	133.0	18.7
20°-30°	170.5	24.0
30°-40°	160.0	22.5
40°-50°	111.6	15.7
50°-60°	57.7	8.1
60°-70°	19.7	2.8
70°-80°	5.7	0.8
80°-90°	1.2	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°	354.3	49.9
0°-40°	514.3	72.4
0°-60°	683.7	96.3
0°-90°	710.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	710.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	550	550	550	550	550	
5°	547	546	537	540	538	52
15°	512	499	469	454	448	143
25°	434	406	363	338	328	199
35°	340	298	245	214	201	212
45°	234	192	135	94	76	180
55°	123	92	46	36	35	110
65°	25	21	16	15	16	29
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°	550.2	550.2	550.2	550.2	550.2
2.5°	549.3	550.2	545.1	550.2	551.0
5°	546.8	545.9	537.4	539.9	538.2
7.5°	541.7	539.1	525.5	522.1	522.1
10°	534.0	528.9	508.4	502.5	499.9
12.5°	523.8	517.0	490.6	479.5	475.2
15°	511.8	499.1	469.3	453.9	448.0
17.5°	494.8	477.8	445.4	427.5	418.2
20°	476.9	455.6	419.9	398.6	389.2
22.5°	458.2	432.6	391.8	368.8	358.5
25°	433.5	406.2	362.8	338.1	327.9
27.5°	409.6	380.7	334.7	306.6	296.4
30°	386.7	352.6	304.0	276.8	264.0
32.5°	363.7	325.3	275.1	245.3	233.4
35°	339.8	298.1	245.3	213.8	201.0
37.5°	314.3	271.7	217.2	183.1	167.8
40°	287.9	243.6	189.1	150.7	136.3
42.5°	261.5	218.0	161.0	121.8	104.8
45°	234.2	191.6	135.4	93.7	75.8
47.5°	207.0	165.2	110.7	68.1	57.1
50°	180.6	140.5	86.0	50.2	46.8
52.5°	151.6	116.7	64.7	41.7	40.9
55°	122.6	92.0	46.0	35.8	34.9
57.5°	97.1	71.5	33.2	29.8	29.0
60°	69.8	51.1	25.5	24.7	23.8
62.5°	46.0	34.9	20.4	19.6	19.6
65°	24.7	21.3	16.2	15.3	16.2
67.5°	10.2	11.9	11.9	12.8	12.8
70°	6.8	7.7	9.4	10.2	10.2
72.5°	5.1	6.0	6.8	7.7	7.7
75°	4.3	4.3	5.1	6.0	6.0
77.5°	2.6	3.4	3.4	4.3	5.1
80°	1.7	2.6	2.6	3.4	3.4
82.5°	0.9	1.7	1.7	2.6	2.6
85°	0.9	0.9	0.9	0.9	1.7
87.5°	0.0	0.0	0.0	0.0	0.9
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	12.81	14.07	13.18	14.38	14.70	6.32	7.58	6.69	7.89	8.21
	3H	12.76	13.87	13.14	14.20	14.57	7.10	8.20	7.48	8.54	8.90
	4H	12.71	13.74	13.12	14.09	14.48	7.30	8.33	7.70	8.68	9.07
	6H	12.64	13.59	13.06	13.96	14.35	7.44	8.39	7.86	8.76	9.15
	8H	12.60	13.49	13.03	13.88	14.29	7.48	8.37	7.91	8.76	9.17
	12H	12.56	13.41	12.99	13.79	14.22	7.50	8.35	7.93	8.74	9.17
4H	2H	12.66	13.69	13.06	14.04	14.42	6.58	7.61	6.98	7.96	8.34
	3H	12.64	13.48	13.06	13.88	14.29	7.49	8.32	7.90	8.73	9.13
	4H	12.59	13.34	13.03	13.76	14.20	7.76	8.51	8.20	8.93	9.37
	6H	12.54	13.17	13.00	13.62	14.09	7.98	8.62	8.44	9.06	9.53
	8H	12.48	13.08	12.96	13.53	14.00	8.04	8.64	8.51	9.09	9.56
	12H	12.44	12.96	12.93	13.45	13.92	8.08	8.61	8.57	9.09	9.57
8H	4H	12.48	13.08	12.95	13.52	14.00	7.75	8.34	8.22	8.79	9.26
	6H	12.42	12.90	12.92	13.40	13.88	8.02	8.50	8.52	9.00	9.48
	8H	12.37	12.80	12.89	13.32	13.81	8.13	8.56	8.65	9.08	9.57
	12H	12.33	12.72	12.85	13.21	13.78	8.20	8.59	8.72	9.09	9.66
12H	4H	12.43	12.96	12.92	13.44	13.92	7.71	8.23	8.20	8.72	9.19
	6H	12.36	12.80	12.89	13.31	13.81	7.98	8.41	8.50	8.93	9.42
	8H	12.33	12.72	12.85	13.21	13.78	8.12	8.51	8.64	9.00	9.58