

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: P1059396

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059396
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)
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-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

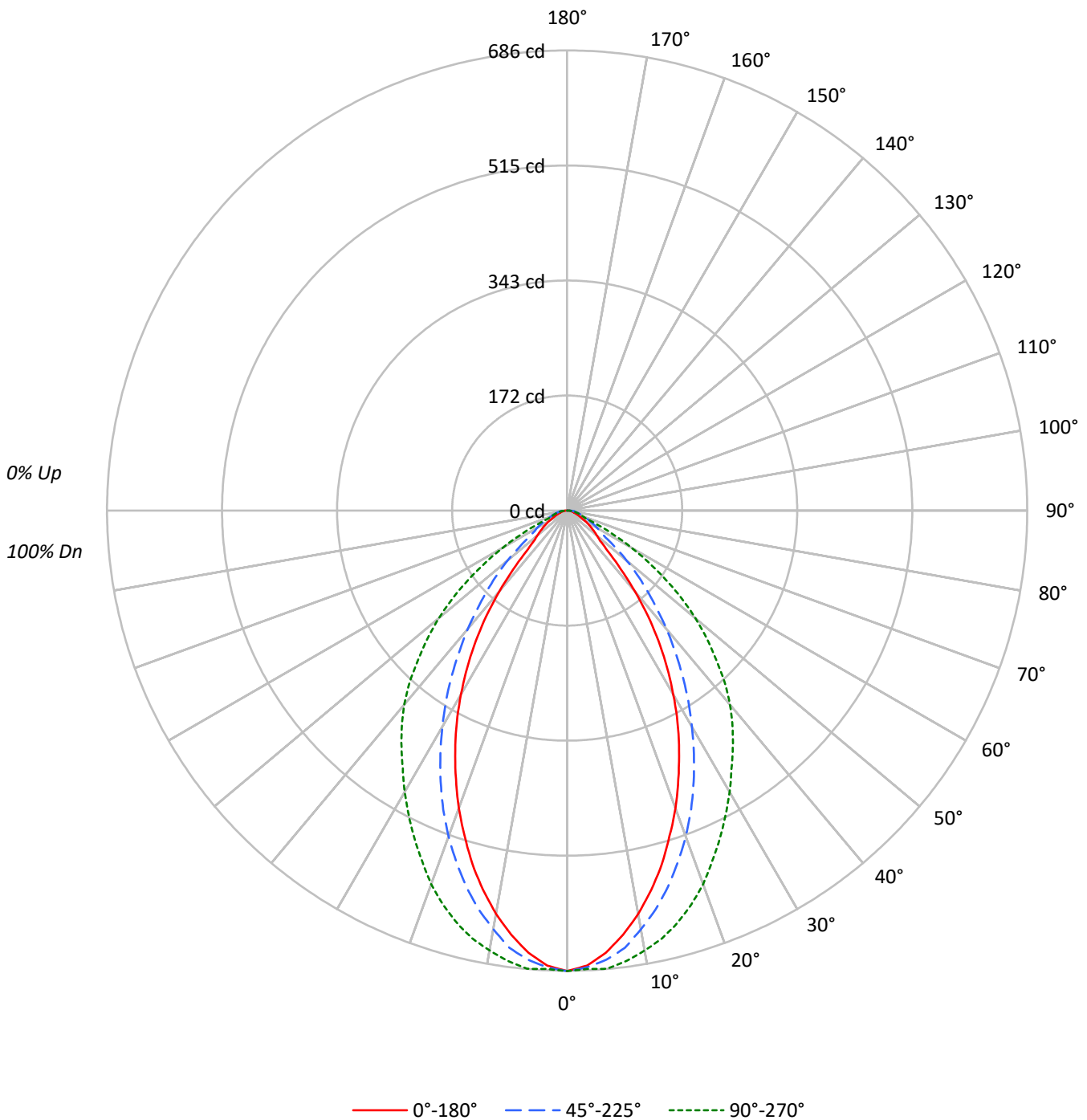
Lumens per Lamp: N/A
Luminaire Lumens: 921.5 lumens
Efficiency: N/A
Efficacy: 35.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8061	8061	8061
5°	7800	7921	8081
10°	7281	7555	7941
15°	6635	7059	7734
20°	5903	6458	7406
25°	5115	5779	6982
30°	4290	5041	6568
35°	3399	4290	6173
40°	2405	3529	5791
45°	1417	2790	5211
50°	1060	2119	4565
55°	891	1431	3667
60°	721	1221	2604
65°	570	1042	1375
70°	498	906	848
75°	463	853	812
80°	460	920	805
85°	579	1374	1037

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5211 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.2	6.9
10°-20°	164.2	17.8
20°-30°	209.1	22.7
30°-40°	196.7	21.3
40°-50°	141.7	15.4
50°-60°	81.8	8.9
60°-70°	37.4	4.1
70°-80°	18.7	2.0
80°-90°	8.8	1.0
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°	436.5	47.4
0°-40°	633.2	68.7
0°-60°	856.6	93.0
0°-90°	921.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	921.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	686	686	686	686	686	
5°	662	673	672	679	686	62
15°	546	565	581	613	636	152
25°	395	415	446	496	539	181
35°	237	258	299	368	431	147
45°	85	107	168	252	314	72
55°	44	45	70	133	179	39
65°	20	29	38	42	50	21
75°	10	20	19	18	18	11
85°	4	9	10	9	8	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	686.5	686.5	686.5	686.5	686.5
2.5°	678.8	687.3	681.4	682.2	683.9
5°	661.7	672.8	672.0	678.8	685.6
7.5°	637.9	650.7	657.5	667.7	677.1
10°	610.6	625.1	633.6	652.4	666.0
12.5°	579.0	597.8	608.9	633.6	653.2
15°	545.8	565.4	580.7	613.1	636.2
17.5°	508.2	529.6	549.2	587.6	615.7
20°	472.4	492.9	516.8	558.6	592.7
22.5°	433.2	455.4	482.7	527.0	565.4
25°	394.8	415.3	446.0	495.5	538.9
27.5°	356.5	376.9	409.3	463.9	511.7
30°	316.4	337.7	371.8	432.4	484.4
32.5°	277.1	297.6	336.0	401.7	456.2
35°	237.1	257.5	299.3	368.4	430.6
37.5°	197.8	219.2	263.5	341.1	405.1
40°	156.9	179.9	230.2	313.0	377.8
42.5°	118.5	143.3	197.0	284.0	347.9
45°	85.3	106.6	168.0	252.4	313.8
47.5°	66.5	77.6	141.6	220.0	282.3
50°	58.0	59.7	116.0	190.2	249.9
52.5°	50.3	52.0	91.2	162.0	215.7
55°	43.5	45.2	69.9	133.0	179.1
57.5°	36.7	39.2	58.0	105.7	144.1
60°	30.7	34.1	52.0	81.0	110.9
62.5°	24.7	30.7	44.3	59.7	79.3
65°	20.5	29.0	37.5	41.8	49.5
67.5°	17.1	26.4	31.6	29.8	29.0
70°	14.5	23.9	26.4	23.9	24.7
72.5°	11.9	22.2	22.2	20.5	20.5
75°	10.2	19.6	18.8	17.9	17.9
77.5°	8.5	17.1	16.2	15.3	14.5
80°	6.8	13.6	13.6	12.8	11.9
82.5°	6.0	11.1	11.1	11.1	9.4
85°	4.3	9.4	10.2	9.4	7.7
87.5°	3.4	8.5	8.5	7.7	5.1
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	7.22	8.54	7.58	8.85	9.17	14.58	15.90	14.95	16.21	16.53
	3H	8.61	9.78	8.99	10.11	10.47	14.81	15.98	15.19	16.31	16.68
	4H	9.16	10.25	9.56	10.60	10.99	14.93	16.02	15.33	16.37	16.75
	6H	9.59	10.60	10.01	10.97	11.36	15.04	16.04	15.46	16.41	16.81
	8H	9.77	10.72	10.20	11.11	11.52	15.09	16.04	15.52	16.43	16.84
	12H	9.93	10.84	10.36	11.22	11.65	15.15	16.06	15.59	16.44	16.87
4H	2H	8.32	9.41	8.72	9.76	10.14	14.54	15.63	14.94	15.98	16.36
	3H	9.98	10.88	10.40	11.28	11.68	14.90	15.79	15.31	16.20	16.60
	4H	10.79	11.59	11.23	12.01	12.45	15.10	15.90	15.53	16.32	16.76
	6H	11.43	12.12	11.89	12.56	13.03	15.32	16.02	15.79	16.46	16.93
	8H	11.66	12.31	12.13	12.76	13.23	15.43	16.07	15.90	16.52	16.99
	12H	11.88	12.45	12.36	12.93	13.41	15.56	16.13	16.04	16.61	17.09
8H	4H	11.24	11.88	11.70	12.33	12.80	15.14	15.78	15.60	16.23	16.70
	6H	12.14	12.67	12.65	13.17	13.65	15.46	15.99	15.97	16.49	16.97
	8H	12.56	13.04	13.09	13.56	14.05	15.65	16.13	16.17	16.65	17.14
	12H	12.99	13.41	13.50	13.90	14.47	15.90	16.33	16.42	16.82	17.39
12H	4H	11.29	11.86	11.78	12.35	12.82	15.13	15.70	15.61	16.18	16.65
	6H	12.28	12.76	12.80	13.27	13.76	15.48	15.96	16.00	16.47	16.96
	8H	12.82	13.24	13.33	13.74	14.31	15.74	16.16	16.25	16.65	17.22