

Scaled data based on original data using
LM-79-2019 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: S123RDR-S775D940-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
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: S123RDR-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

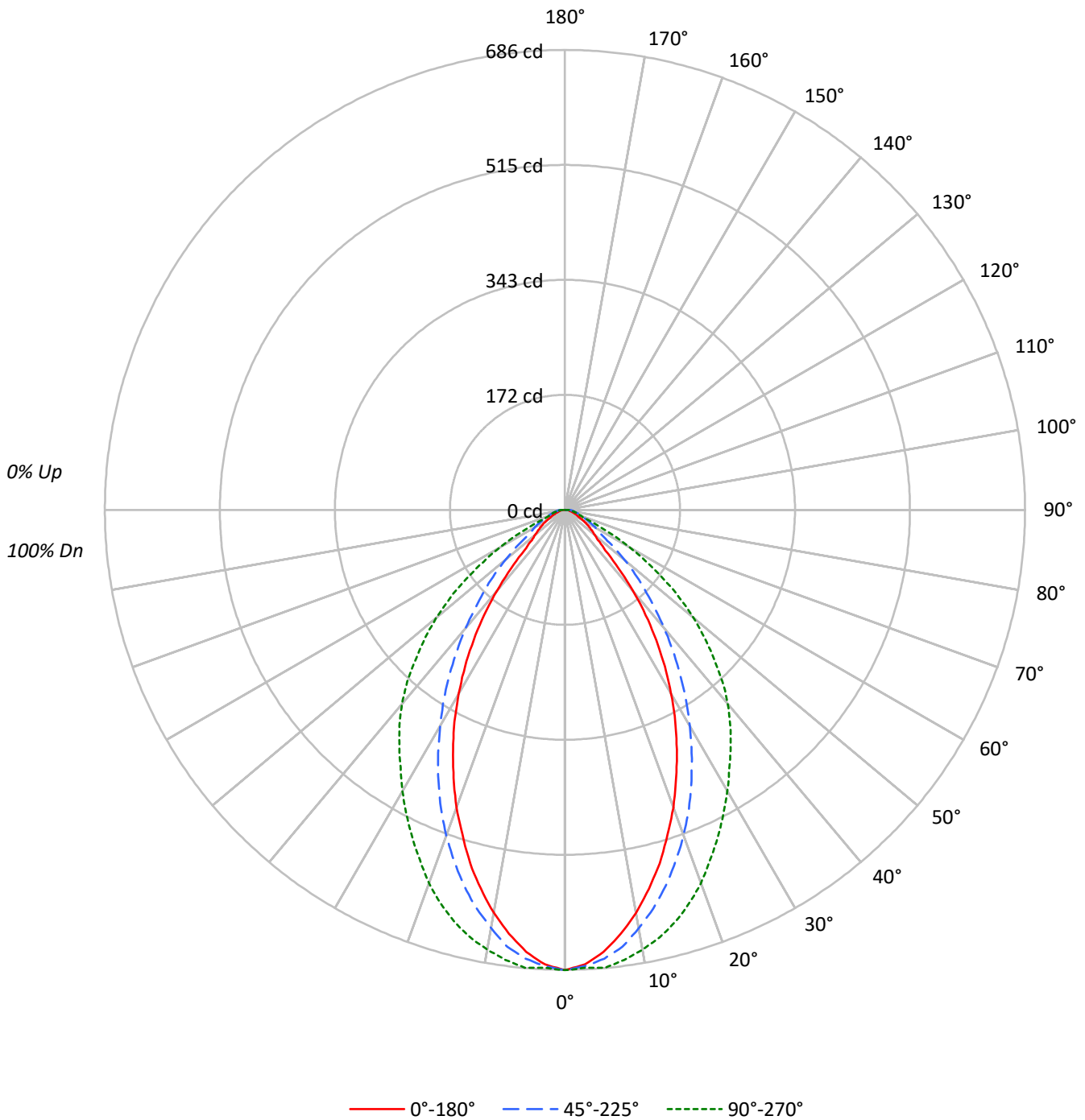
Lumens per Lamp: N/A
Luminaire Lumens: 921.5 lumens
Efficiency: N/A
Efficacy: 35.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (Ain): 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

(END OF REPORT)