

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: P1059349

Luminaire Tested: S123RDR-S775D840-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059349
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: S123RDR-S775D840-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, 80 CRI LEDS
Ballast/Driver: -

Summary

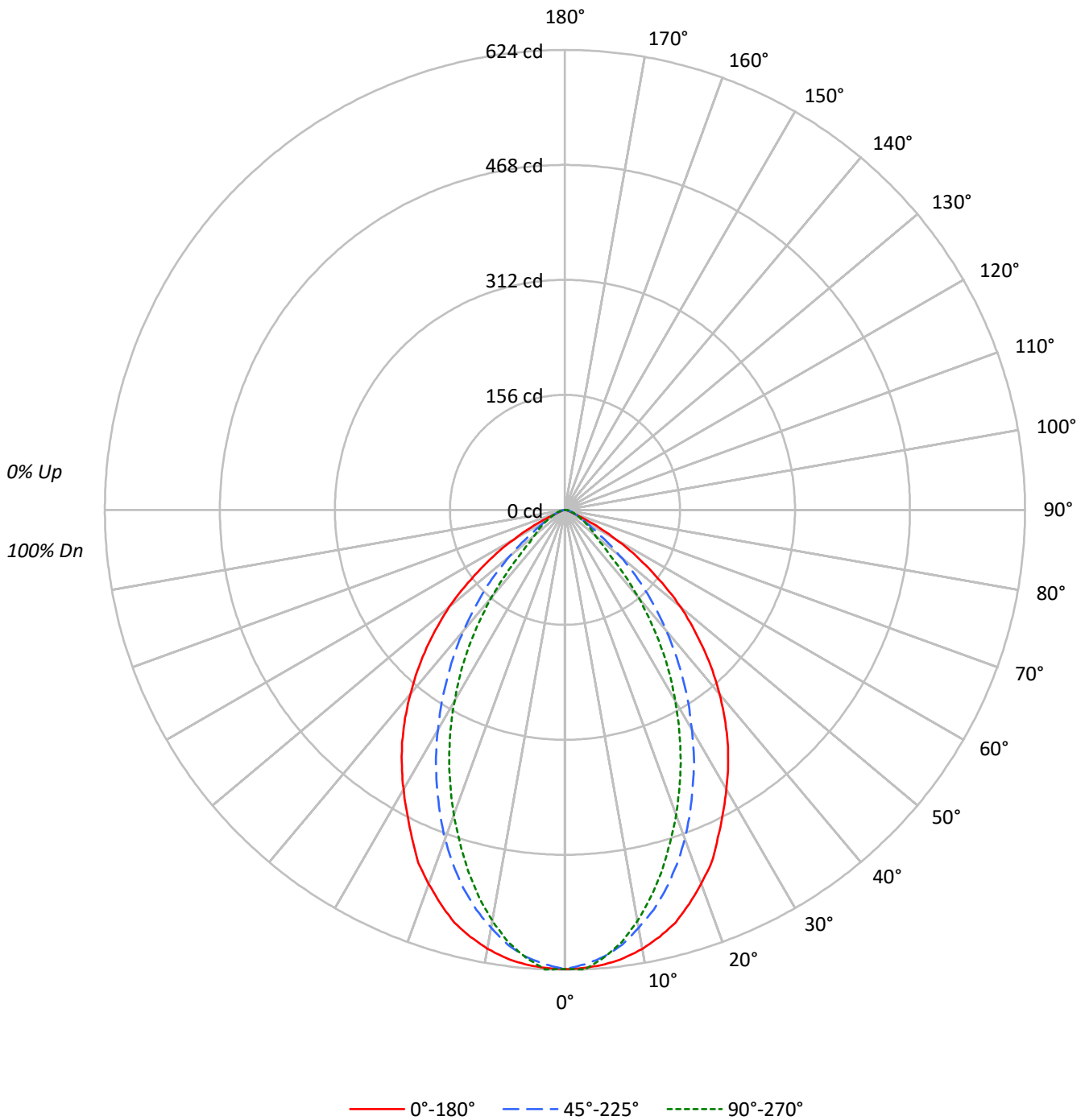
Lumens per Lamp: N/A
Luminaire Lumens: 804.4 lumens
Efficiency: N/A
Efficacy: 31.2 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1059349

CATALOG NUMBER: S123RDR-S775D840-X4F0-XX-UDD-SVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1059349

CATALOG NUMBER: S123RDR-S775D840-X4F0-XX-UDD-SVL-B

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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91				91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82				82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73				73
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66				66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60				60
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55				55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50				50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46				46
9	67	56	49	45	66	56	49	44	55	48	44	54	48	44	53	48	44	42				42
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7317	7317	7317
5°	7299	7174	7186
10°	7210	6866	6751
15°	7047	6460	6167
20°	6749	5942	5508
25°	6360	5324	4811
30°	5937	4668	4054
35°	5516	3982	3263
40°	4997	3282	2365
45°	4404	2547	1425
50°	3736	1779	968
55°	2844	1067	809
60°	1858	679	634
65°	778	508	508
70°	264	364	398
75°	218	263	309
80°	128	196	264
85°	135	135	256

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4404 cd/sqm



TEST NUMBER: P1059349

CATALOG NUMBER: S123RDR-S775D840-X4F0-XX-UDD-SVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.5	7.2
10°-20°	150.6	18.7
20°-30°	193.1	24.0
30°-40°	181.2	22.5
40°-50°	126.4	15.7
50°-60°	65.4	8.1
60°-70°	22.4	2.8
70°-80°	6.4	0.8
80°-90°	1.4	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°	401.3	49.9
0°-40°	582.5	72.4
0°-60°	774.3	96.3
0°-90°	804.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	804.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	623	623	623	623	623	
5°	619	618	609	612	610	59
15°	580	565	531	514	507	162
25°	491	460	411	383	371	226
35°	385	338	278	242	228	240
45°	265	217	153	106	86	204
55°	139	104	52	40	40	125
65°	28	24	18	17	18	33
75°	5	5	6	7	7	5
85°	1	1	1	1	2	1
90°	0	0	0	0	0	



TEST NUMBER: P1059349

CATALOG NUMBER: S123RDR-S775D840-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	623.1	623.1	623.1	623.1	623.1
2.5°	622.1	623.1	617.3	623.1	624.0
5°	619.2	618.2	608.6	611.5	609.6
7.5°	613.4	610.5	595.1	591.2	591.2
10°	604.7	599.0	575.8	569.1	566.2
12.5°	593.2	585.5	555.6	543.0	538.2
15°	579.7	565.2	531.4	514.1	507.3
17.5°	560.4	541.1	504.4	484.2	473.6
20°	540.1	516.0	475.5	451.4	440.8
22.5°	518.9	490.0	443.7	417.6	406.1
25°	490.9	460.1	410.9	382.9	371.3
27.5°	463.9	431.1	379.0	347.2	335.6
30°	437.9	399.3	344.3	313.5	299.0
32.5°	411.8	368.4	311.5	277.8	264.3
35°	384.8	337.6	277.8	242.1	227.6
37.5°	355.9	307.7	245.9	207.4	190.0
40°	326.0	275.8	214.1	170.7	154.3
42.5°	296.1	246.9	182.3	137.9	118.6
45°	265.2	217.0	153.4	106.1	85.8
47.5°	234.4	187.1	125.4	77.2	64.6
50°	204.5	159.1	97.4	56.9	53.0
52.5°	171.7	132.1	73.3	47.3	46.3
55°	138.9	104.2	52.1	40.5	39.5
57.5°	110.0	81.0	37.6	33.8	32.8
60°	79.1	57.9	28.9	28.0	27.0
62.5°	52.1	39.5	23.1	22.2	22.2
65°	28.0	24.1	18.3	17.4	18.3
67.5°	11.6	13.5	13.5	14.5	14.5
70°	7.7	8.7	10.6	11.6	11.6
72.5°	5.8	6.8	7.7	8.7	8.7
75°	4.8	4.8	5.8	6.8	6.8
77.5°	2.9	3.9	3.9	4.8	5.8
80°	1.9	2.9	2.9	3.9	3.9
82.5°	1.0	1.9	1.9	2.9	2.9
85°	1.0	1.0	1.0	1.0	1.9
87.5°	0.0	0.0	0.0	0.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)