

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: P1059361

Luminaire Tested: S123RDR-S775D850-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059361
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-28)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S775D850-X4F0-XX-UDD-WVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

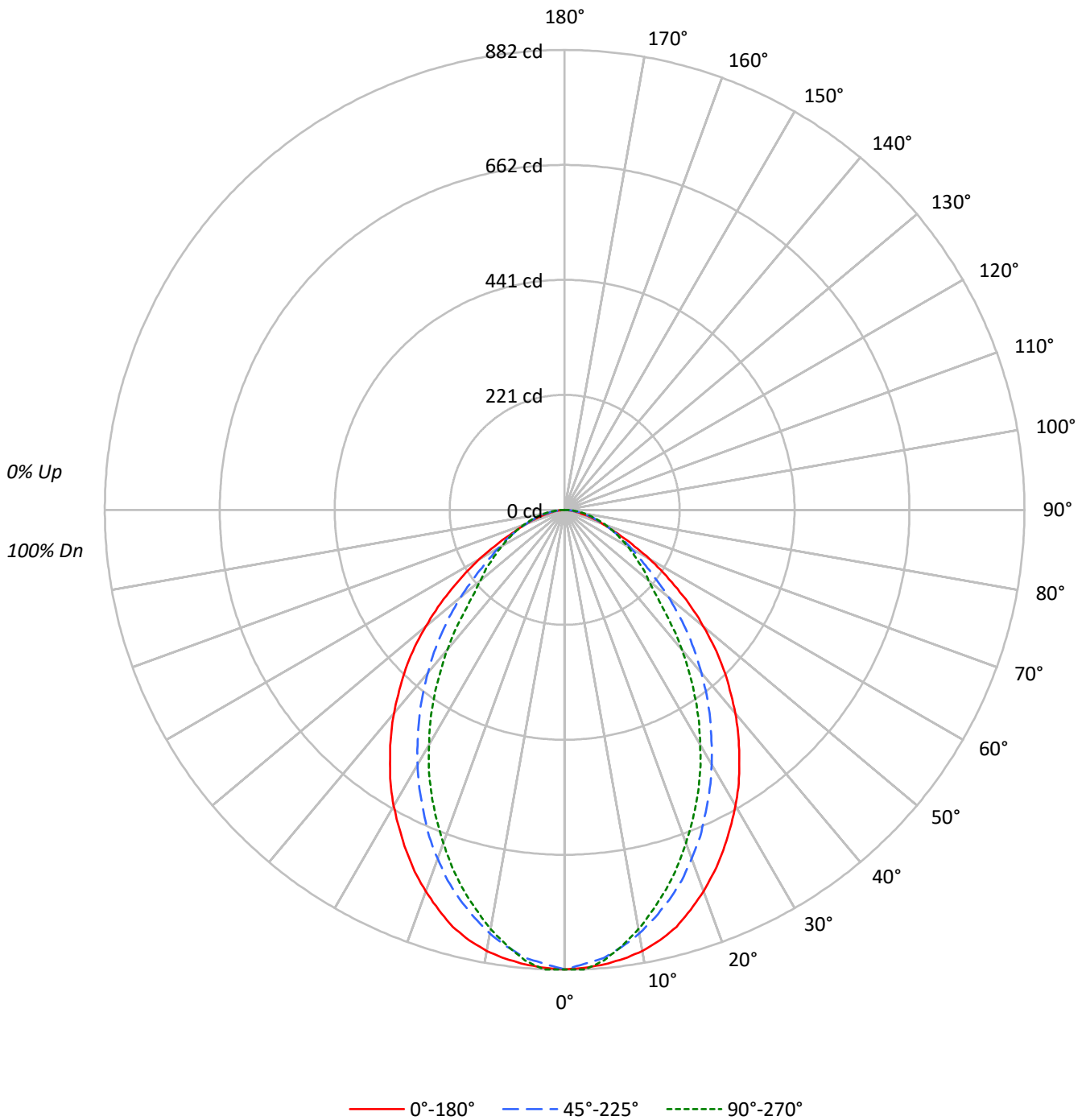
Lumens per Lamp: N/A
Luminaire Lumens: 1541.3 lumens
Efficiency: N/A
Efficacy: 59.7 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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: P1059361

CATALOG NUMBER: S123RDR-S775D850-X4F0-XX-UDD-WVL-B

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	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	88
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10347	10347	10347
5°	10313	10163	10225
10°	10242	9838	9737
15°	10069	9412	9155
20°	9728	8895	8497
25°	9331	8288	7822
30°	8889	7654	7051
35°	8366	6970	6240
40°	7810	6251	5374
45°	7159	5523	4414
50°	6346	4741	3831
55°	5399	3968	3513
60°	4403	3457	3260
65°	3354	3062	3031
70°	2620	2726	2836
75°	2114	2450	2645
80°	1576	2008	2434
85°	862	1280	2142

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7159 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.8	5.3
10°-20°	220.1	14.3
20°-30°	299.2	19.4
30°-40°	310.2	20.1
40°-50°	261.6	17.0
50°-60°	185.7	12.0
60°-70°	113.5	7.4
70°-80°	56.5	3.7
80°-90°	12.8	0.8
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°	601.1	39.0
0°-40°	911.2	59.1
0°-60°	1358.5	88.1
0°-90°	1541.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1541.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	881	881	881	881	881	
5°	875	875	862	868	868	83
15°	828	812	774	760	753	232
25°	720	688	640	616	604	331
35°	584	539	486	452	435	365
45°	431	386	333	287	266	331
55°	264	236	194	177	172	237
65°	121	116	110	110	109	123
75°	47	50	54	56	58	50
85°	6	7	10	14	16	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	881.2	881.2	881.2	881.2	881.2
2.5°	879.1	880.2	871.7	881.2	882.3
5°	874.9	874.9	862.2	867.5	867.5
7.5°	868.5	866.4	845.2	845.2	843.1
10°	859.0	852.6	825.1	819.8	816.6
12.5°	845.2	834.6	800.7	791.2	784.8
15°	828.3	812.4	774.2	760.5	753.1
17.5°	803.9	788.0	745.7	726.6	718.1
20°	778.5	755.2	711.8	692.7	680.0
22.5°	750.9	721.3	678.9	655.6	641.9
25°	720.2	688.5	639.7	616.4	603.7
27.5°	687.4	652.4	602.7	576.2	563.5
30°	655.6	615.4	564.5	534.9	520.0
32.5°	621.7	576.2	524.3	493.6	478.7
35°	583.6	539.1	486.2	452.3	435.3
37.5°	547.6	502.0	447.0	411.0	391.9
40°	509.5	463.9	407.8	370.7	350.6
42.5°	469.2	425.8	370.7	327.3	308.2
45°	431.1	385.5	332.6	287.0	265.8
47.5°	389.8	347.4	295.5	248.9	234.1
50°	347.4	308.2	259.5	217.1	209.7
52.5°	306.1	273.3	223.5	195.9	192.8
55°	263.7	236.2	193.8	176.9	171.6
57.5°	224.5	204.4	166.3	157.8	155.7
60°	187.5	170.5	147.2	141.9	138.8
62.5°	151.5	141.9	128.2	126.0	123.9
65°	120.7	116.5	110.2	110.2	109.1
67.5°	95.3	95.3	94.3	96.4	95.3
70°	76.3	77.3	79.4	81.6	82.6
72.5°	60.4	63.5	65.7	68.8	69.9
75°	46.6	49.8	54.0	56.1	58.3
77.5°	33.9	37.1	41.3	44.5	46.6
80°	23.3	25.4	29.7	33.9	36.0
82.5°	14.8	15.9	19.1	23.3	25.4
85°	6.4	7.4	9.5	13.8	15.9
87.5°	0.0	0.0	1.1	4.2	7.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)