

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: P1059394

Luminaire Tested: S123RDR-S775D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
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: S123RDR-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

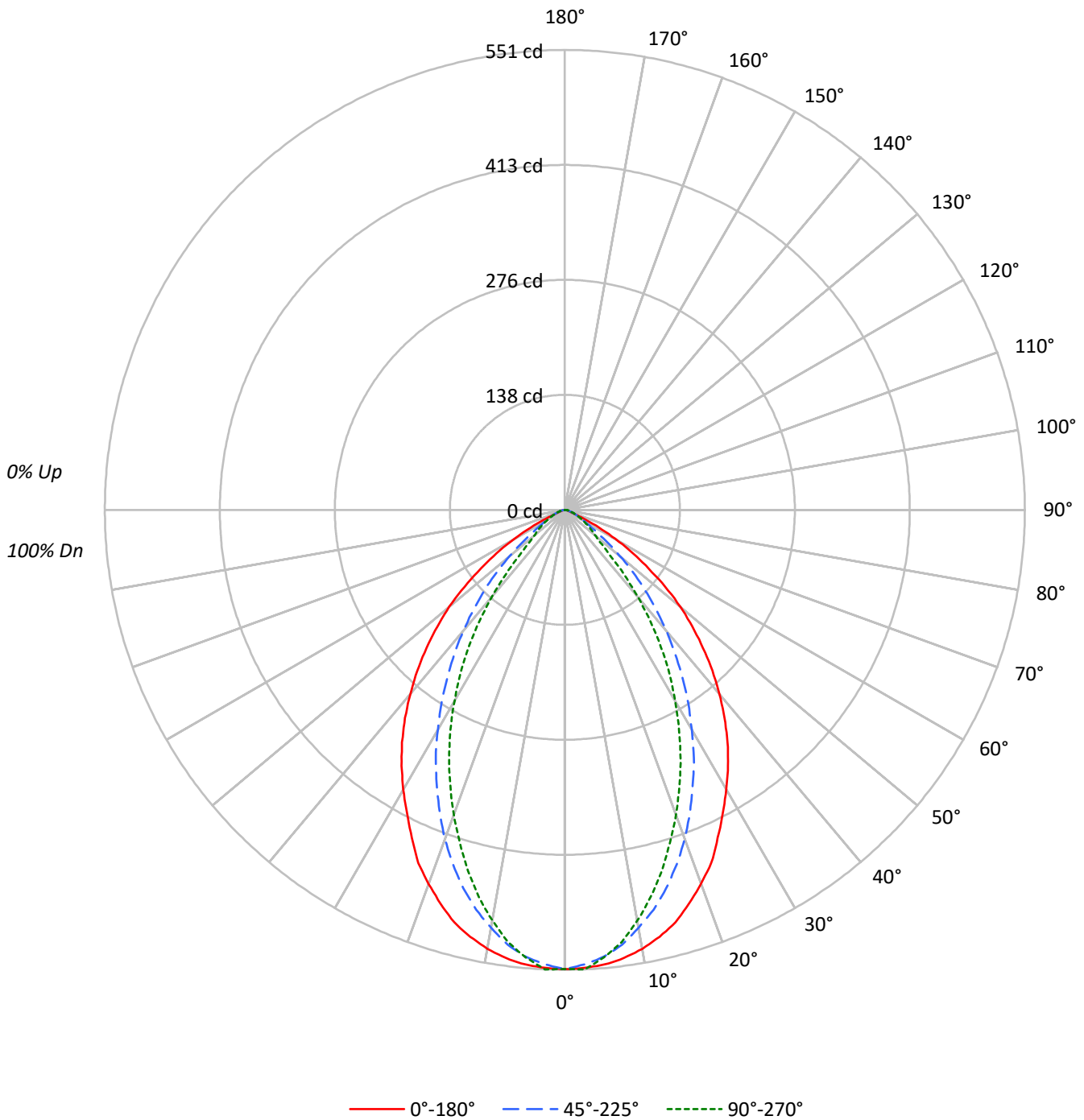
Lumens per Lamp: N/A
Luminaire Lumens: 710.3 lumens
Efficiency: N/A
Efficacy: 27.5 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

(END OF REPORT)