

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: P1059397

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059397
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-S775D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

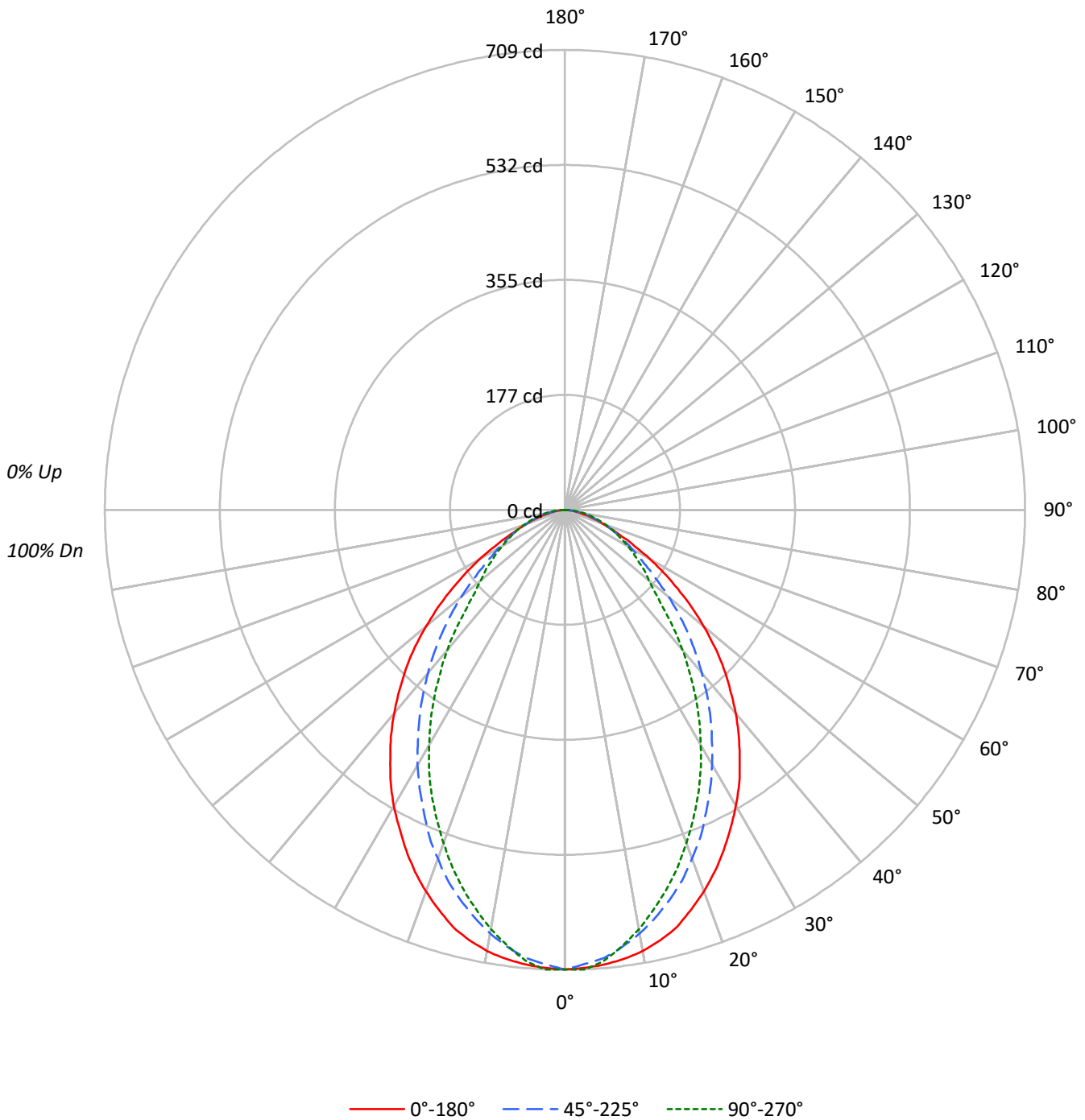
Lumens per Lamp: N/A
Luminaire Lumens: 1239.3 lumens
Efficiency: N/A
Efficacy: 48.0 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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: P1059397

CATALOG NUMBER: S123RDR-S775D940-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	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°	8321	8321	8321
5°	8292	8171	8222
10°	8236	7910	7829
15°	8096	7568	7361
20°	7823	7151	6833
25°	7503	6665	6289
30°	7148	6154	5670
35°	6727	5603	5017
40°	6279	5026	4321
45°	5756	4441	3550
50°	5102	3813	3080
55°	4342	3190	2825
60°	3539	2781	2621
65°	2698	2462	2437
70°	2105	2194	2280
75°	1701	1969	2123
80°	1265	1609	1961
85°	687	1037	1725

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5756 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.8	5.3
10°-20°	177.0	14.3
20°-30°	240.6	19.4
30°-40°	249.4	20.1
40°-50°	210.3	17.0
50°-60°	149.3	12.0
60°-70°	91.2	7.4
70°-80°	45.4	3.7
80°-90°	10.3	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°	483.3	39.0
0°-40°	732.7	59.1
0°-60°	1092.3	88.1
0°-90°	1239.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1239.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	709	709	709	709	709	
5°	704	704	693	698	698	67
15°	666	653	622	612	606	187
25°	579	554	514	496	485	266
35°	469	434	391	364	350	293
45°	347	310	267	231	214	266
55°	212	190	156	142	138	190
65°	97	94	89	89	88	99
75°	38	40	43	45	47	40
85°	5	6	8	11	13	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	708.6	708.6	708.6	708.6	708.6
2.5°	706.9	707.7	700.9	708.6	709.4
5°	703.5	703.5	693.2	697.5	697.5
7.5°	698.3	696.6	679.6	679.6	677.9
10°	690.7	685.6	663.4	659.2	656.6
12.5°	679.6	671.1	643.8	636.2	631.1
15°	666.0	653.2	622.5	611.5	605.5
17.5°	646.4	633.6	599.6	584.2	577.4
20°	626.0	607.2	572.3	557.0	546.8
22.5°	603.8	580.0	545.9	527.2	516.1
25°	579.1	553.6	514.4	495.7	485.4
27.5°	552.7	524.6	484.6	463.3	453.1
30°	527.2	494.8	453.9	430.1	418.2
32.5°	499.9	463.3	421.6	396.9	384.9
35°	469.3	433.5	390.9	363.6	350.0
37.5°	440.3	403.7	359.4	330.4	315.1
40°	409.6	373.0	327.9	298.1	281.9
42.5°	377.3	342.4	298.1	263.2	247.8
45°	346.6	310.0	267.4	230.8	213.8
47.5°	313.4	279.3	237.6	200.1	188.2
50°	279.3	247.8	208.7	174.6	168.6
52.5°	246.1	219.7	179.7	157.6	155.0
55°	212.1	189.9	155.8	142.2	138.0
57.5°	180.5	164.4	133.7	126.9	125.2
60°	150.7	137.1	118.4	114.1	111.6
62.5°	121.8	114.1	103.0	101.3	99.6
65°	97.1	93.7	88.6	88.6	87.7
67.5°	76.6	76.6	75.8	77.5	76.6
70°	61.3	62.2	63.9	65.6	66.4
72.5°	48.5	51.1	52.8	55.4	56.2
75°	37.5	40.0	43.4	45.1	46.8
77.5°	27.3	29.8	33.2	35.8	37.5
80°	18.7	20.4	23.8	27.3	29.0
82.5°	11.9	12.8	15.3	18.7	20.4
85°	5.1	6.0	7.7	11.1	12.8
87.5°	0.0	0.0	0.9	3.4	6.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)