

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: P1058051

Luminaire Tested: S122RDR-S675D840-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058051
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S675D840-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

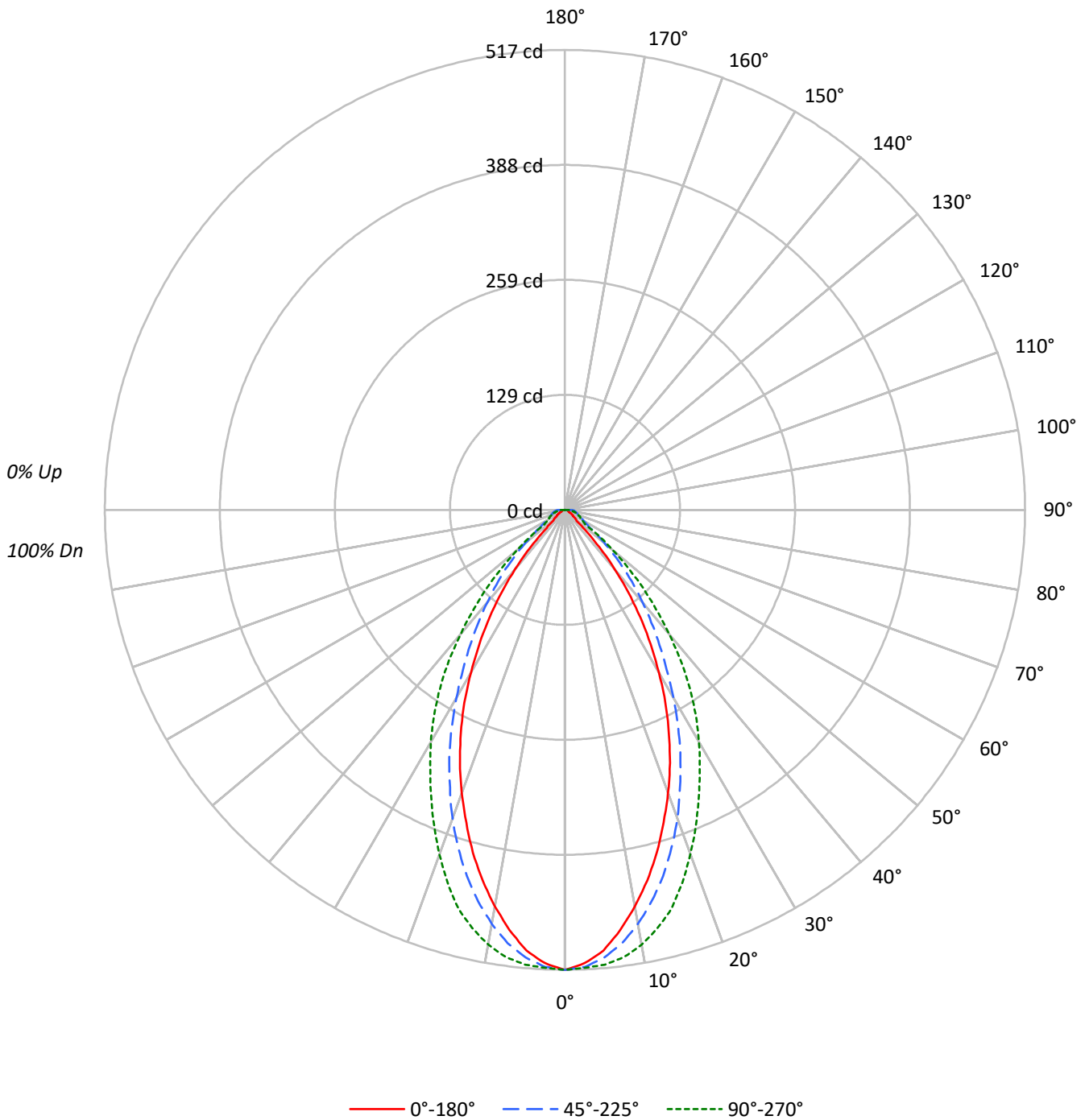
Lumens per Lamp: N/A
Luminaire Lumens: 557.5 lumens
Efficiency: N/A
Efficacy: 21.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90				
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74				
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67				
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61				
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57				
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52				
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48				
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45				
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9542	9542	9542
5°	9211	9358	9506
10°	8482	8855	9299
15°	7626	8138	8856
20°	6653	7256	8092
25°	5628	6253	7242
30°	4496	5193	6418
35°	3325	4174	5512
40°	2100	3269	4391
45°	827	2456	3231
50°	428	1651	1989
55°	351	1084	891
60°	255	878	805
65°	218	821	821
70°	216	858	804
75°	285	991	848
80°	425	1265	946
85°	635	2096	1249

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 4188 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.3	8.5
10°-20°	119.5	21.4
20°-30°	142.0	25.5
30°-40°	118.1	21.2
40°-50°	66.0	11.8
50°-60°	26.7	4.8
60°-70°	17.0	3.1
70°-80°	12.8	2.3
80°-90°	8.1	1.5
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°	308.7	55.4
0°-40°	426.8	76.6
0°-60°	519.5	93.2
0°-90°	557.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	557.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	517	517	517	517	517	
5°	497	506	505	509	513	46
15°	399	411	426	448	464	111
25°	276	287	307	331	356	126
35°	148	162	185	216	245	92
45°	32	54	94	110	124	30
55°	11	23	34	33	28	9
65°	5	20	19	18	19	5
75°	4	14	14	13	12	4
85°	3	9	10	9	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	517.1	517.1	517.1	517.1	517.1
2.5°	510.2	518.1	514.2	514.2	515.2
5°	497.3	506.2	505.2	509.2	513.2
7.5°	476.5	486.4	491.4	500.3	507.2
10°	452.7	463.6	472.6	486.4	496.3
12.5°	427.0	437.9	450.8	468.6	481.5
15°	399.2	411.1	426.0	447.8	463.6
17.5°	368.5	381.4	398.3	422.0	438.9
20°	338.8	351.7	369.5	393.3	412.1
22.5°	308.1	319.0	337.8	361.6	384.4
25°	276.4	287.3	307.1	330.9	355.7
27.5°	244.7	255.6	275.4	300.2	327.9
30°	211.0	222.9	243.7	271.4	301.2
32.5°	179.3	191.2	213.0	243.7	273.4
35°	147.6	161.5	185.3	216.0	244.7
37.5°	116.9	132.8	159.5	188.2	214.0
40°	87.2	104.0	135.7	160.5	182.3
42.5°	57.5	77.3	113.9	134.7	151.6
45°	31.7	53.5	94.1	110.0	123.8
47.5°	17.8	34.7	74.3	87.2	95.1
50°	14.9	25.8	57.5	66.4	69.3
52.5°	11.9	23.8	43.6	48.5	46.6
55°	10.9	22.8	33.7	32.7	27.7
57.5°	8.9	22.8	26.7	23.8	23.8
60°	6.9	21.8	23.8	20.8	21.8
62.5°	5.9	20.8	21.8	19.8	19.8
65°	5.0	19.8	18.8	17.8	18.8
67.5°	4.0	17.8	17.8	16.8	16.8
70°	4.0	16.8	15.9	14.9	14.9
72.5°	4.0	14.9	14.9	13.9	13.9
75°	4.0	13.9	13.9	12.9	11.9
77.5°	4.0	11.9	12.9	11.9	10.9
80°	4.0	10.9	11.9	10.9	8.9
82.5°	4.0	9.9	10.9	9.9	7.9
85°	3.0	8.9	9.9	8.9	5.9
87.5°	3.0	8.9	9.9	7.9	5.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)