

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: P1057971

Luminaire Tested: S122RDR-S485D840-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057971
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S485D840-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

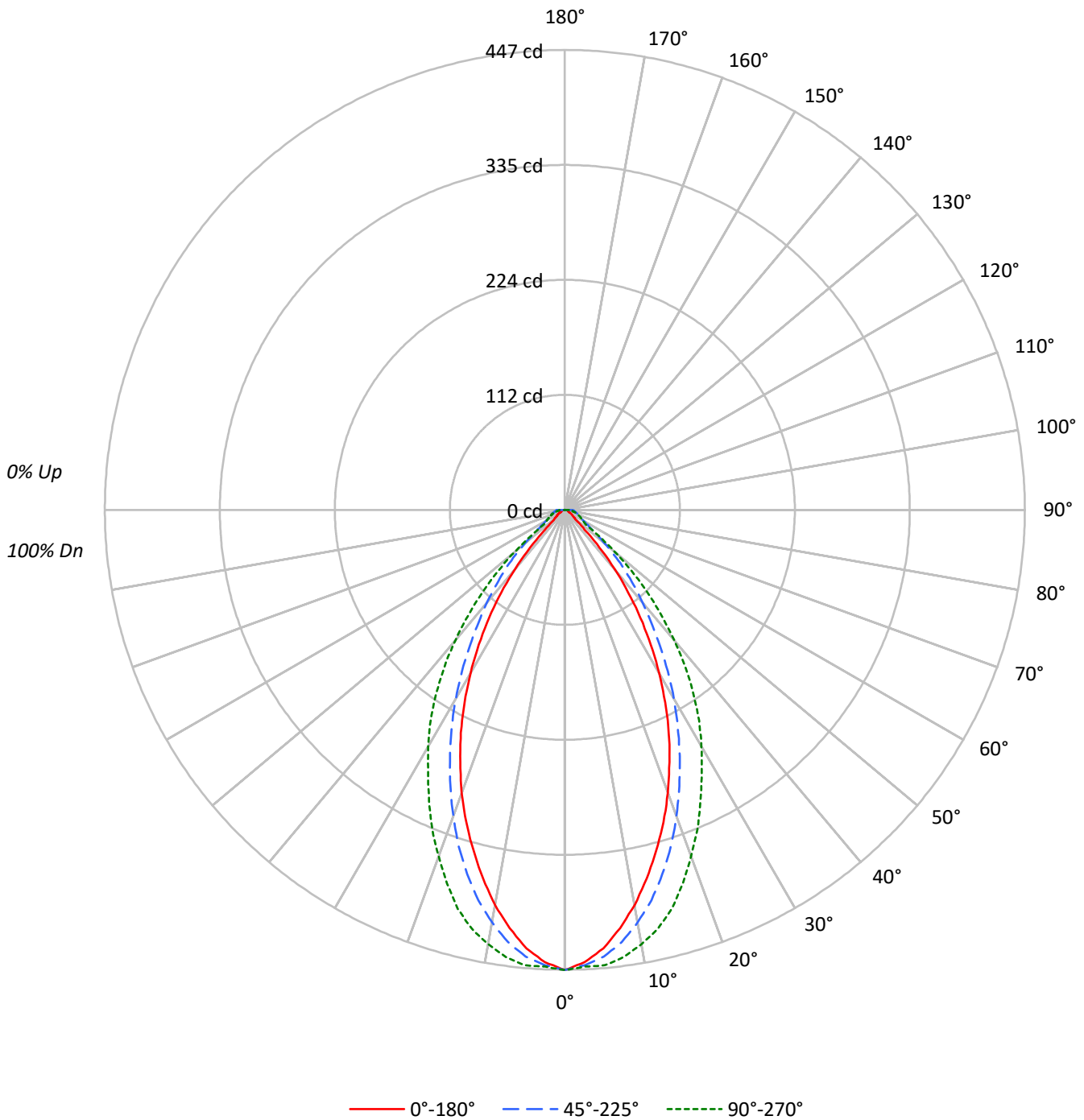
Lumens per Lamp: N/A
Luminaire Lumens: 486.8 lumens
Efficiency: N/A
Efficacy: 24.8 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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: P1057971

CATALOG NUMBER: S122RDR-S485D840-X4F0-XX-UDD-BVL-W

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	76	81	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	67	64	71	66	63	61				
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56				
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52				
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48				
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45				
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8252	8252	8252
5°	7926	8072	8232
10°	7307	7630	8031
15°	6549	6999	7668
20°	5748	6225	7040
25°	4866	5375	6352
30°	3903	4513	5657
35°	2886	3611	4899
40°	1809	2828	3982
45°	710	2129	2951
50°	350	1438	1809
55°	277	943	804
60°	210	768	738
65°	157	720	720
70°	194	734	734
75°	207	813	763
80°	308	1063	839
85°	614	1821	1207

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 3342 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.8	8.4
10°-20°	103.3	21.2
20°-30°	123.5	25.4
30°-40°	104.0	21.4
40°-50°	59.2	12.2
50°-60°	23.4	4.8
60°-70°	14.7	3.0
70°-80°	10.9	2.2
80°-90°	7.0	1.4
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°	267.7	55.0
0°-40°	371.6	76.3
0°-60°	454.2	93.3
0°-90°	486.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	486.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	447	447	447	447	447	
5°	428	437	436	441	444	40
15°	343	355	366	388	401	96
25°	239	250	264	291	312	109
35°	128	140	160	195	218	79
45°	27	48	82	102	113	26
55°	9	19	29	30	25	8
65°	4	16	16	16	16	4
75°	3	11	11	11	11	3
85°	3	8	9	8	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	447.2	447.2	447.2	447.2	447.2
2.5°	440.1	447.9	442.9	443.6	444.4
5°	427.9	437.2	435.8	440.8	444.4
7.5°	410.0	420.0	423.6	432.2	438.6
10°	390.0	401.4	407.2	420.8	428.6
12.5°	367.1	380.0	388.6	405.7	417.2
15°	342.8	354.9	366.4	387.8	401.4
17.5°	318.4	330.6	342.8	366.4	380.7
20°	292.7	304.1	317.0	342.0	358.5
22.5°	265.5	277.6	290.5	316.3	336.3
25°	239.0	249.7	264.0	291.2	312.0
27.5°	211.1	221.8	237.6	265.5	287.7
30°	183.2	193.9	211.8	240.4	265.5
32.5°	155.3	166.7	186.0	217.5	242.6
35°	128.1	139.5	160.3	194.6	217.5
37.5°	101.6	114.5	137.4	171.0	192.5
40°	75.1	90.2	117.4	147.4	165.3
42.5°	50.1	68.7	98.7	123.8	138.8
45°	27.2	47.9	81.6	102.3	113.1
47.5°	15.0	30.8	65.1	81.6	88.0
50°	12.2	21.5	50.1	62.3	63.0
52.5°	10.0	19.3	37.2	44.4	40.8
55°	8.6	18.6	29.3	30.1	25.0
57.5°	7.2	17.9	24.3	21.5	21.5
60°	5.7	17.9	20.8	19.3	20.0
62.5°	4.3	17.9	18.6	17.2	17.9
65°	3.6	16.5	16.5	15.7	16.5
67.5°	3.6	15.0	15.0	14.3	15.0
70°	3.6	14.3	13.6	13.6	13.6
72.5°	2.9	12.9	12.9	12.2	12.2
75°	2.9	11.4	11.4	10.7	10.7
77.5°	2.9	10.7	10.7	10.0	9.3
80°	2.9	9.3	10.0	9.3	7.9
82.5°	2.9	8.6	9.3	8.6	6.4
85°	2.9	7.9	8.6	7.9	5.7
87.5°	2.1	7.9	7.9	6.4	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)