

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: P1057962

Luminaire Tested: S122RDR-S485D835-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057962
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-S485D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

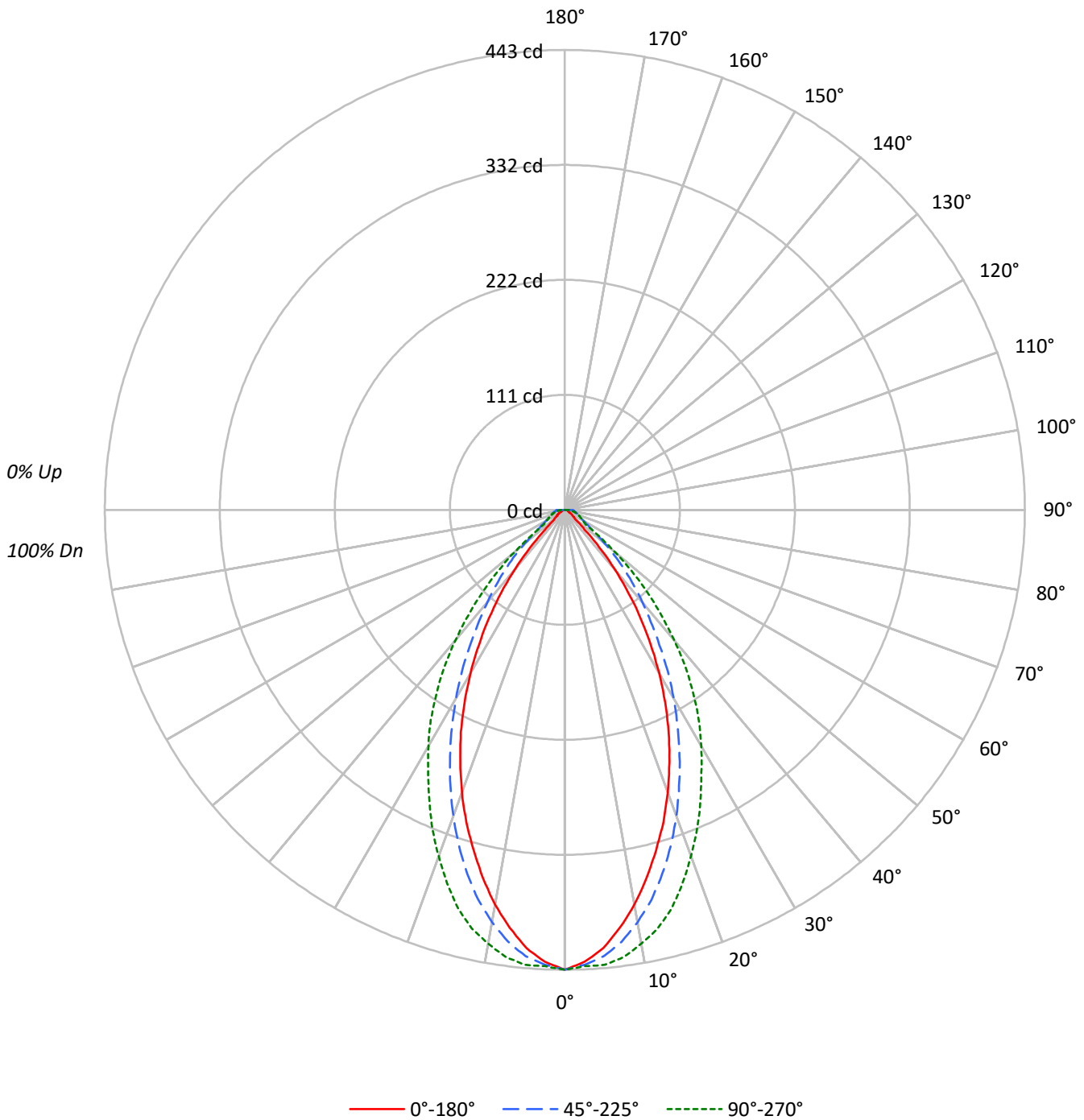
Lumens per Lamp: N/A
Luminaire Lumens: 482.0 lumens
Efficiency: N/A
Efficacy: 24.6 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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: P1057962

CATALOG NUMBER: S122RDR-S485D835-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°	8173	8173	8173
5°	7848	7993	8150
10°	7236	7555	7952
15°	6484	6931	7594
20°	5691	6164	6971
25°	4819	5324	6289
30°	3865	4468	5602
35°	2856	3575	4852
40°	1792	2799	3943
45°	702	2109	2923
50°	344	1424	1791
55°	273	936	798
60°	210	757	731
65°	153	712	712
70°	189	728	728
75°	200	806	756
80°	298	1052	829
85°	593	1800	1207

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 3300 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.4	8.4
10°-20°	102.3	21.2
20°-30°	122.3	25.4
30°-40°	103.0	21.4
40°-50°	58.6	12.2
50°-60°	23.1	4.8
60°-70°	14.6	3.0
70°-80°	10.8	2.2
80°-90°	6.9	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°	265.0	55.0
0°-40°	368.0	76.3
0°-60°	449.8	93.3
0°-90°	482.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	482.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	443	443	443	443	443	
5°	424	433	432	436	440	39
15°	339	352	363	384	398	95
25°	237	247	262	288	309	108
35°	127	138	159	193	215	79
45°	27	48	81	101	112	25
55°	8	18	29	30	25	8
65°	4	16	16	16	16	4
75°	3	11	11	11	11	3
85°	3	8	8	8	6	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	442.9	442.9	442.9	442.9	442.9
2.5°	435.8	443.6	438.6	439.3	440.0
5°	423.7	432.9	431.5	436.5	440.0
7.5°	406.0	415.9	419.5	428.0	434.4
10°	386.2	397.5	403.2	416.6	424.4
12.5°	363.5	376.3	384.8	401.8	413.1
15°	339.4	351.5	362.8	384.0	397.5
17.5°	315.3	327.4	339.4	362.8	377.0
20°	289.8	301.1	313.9	338.7	355.0
22.5°	262.9	274.9	287.7	313.2	333.0
25°	236.7	247.3	261.5	288.4	308.9
27.5°	209.0	219.7	235.2	262.9	284.8
30°	181.4	192.0	209.7	238.1	262.9
32.5°	153.8	165.1	184.2	215.4	240.2
35°	126.8	138.2	158.7	192.7	215.4
37.5°	100.6	113.4	136.0	169.3	190.6
40°	74.4	89.3	116.2	146.0	163.7
42.5°	49.6	68.0	97.8	122.6	137.5
45°	26.9	47.5	80.8	101.3	112.0
47.5°	14.9	30.5	64.5	80.8	87.2
50°	12.0	21.3	49.6	61.6	62.4
52.5°	9.9	19.1	36.8	43.9	40.4
55°	8.5	18.4	29.1	29.8	24.8
57.5°	7.1	17.7	24.1	21.3	21.3
60°	5.7	17.7	20.5	19.1	19.8
62.5°	4.3	17.7	18.4	17.0	17.7
65°	3.5	16.3	16.3	15.6	16.3
67.5°	3.5	14.9	14.9	14.2	14.9
70°	3.5	14.2	13.5	13.5	13.5
72.5°	2.8	12.8	12.8	12.0	12.0
75°	2.8	11.3	11.3	10.6	10.6
77.5°	2.8	10.6	10.6	9.9	9.2
80°	2.8	9.2	9.9	9.2	7.8
82.5°	2.8	8.5	9.2	8.5	6.4
85°	2.8	7.8	8.5	7.8	5.7
87.5°	2.1	7.8	7.8	6.4	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)