

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: P1057968

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057968
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S485D835-X4F0-XX-UDD-WVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

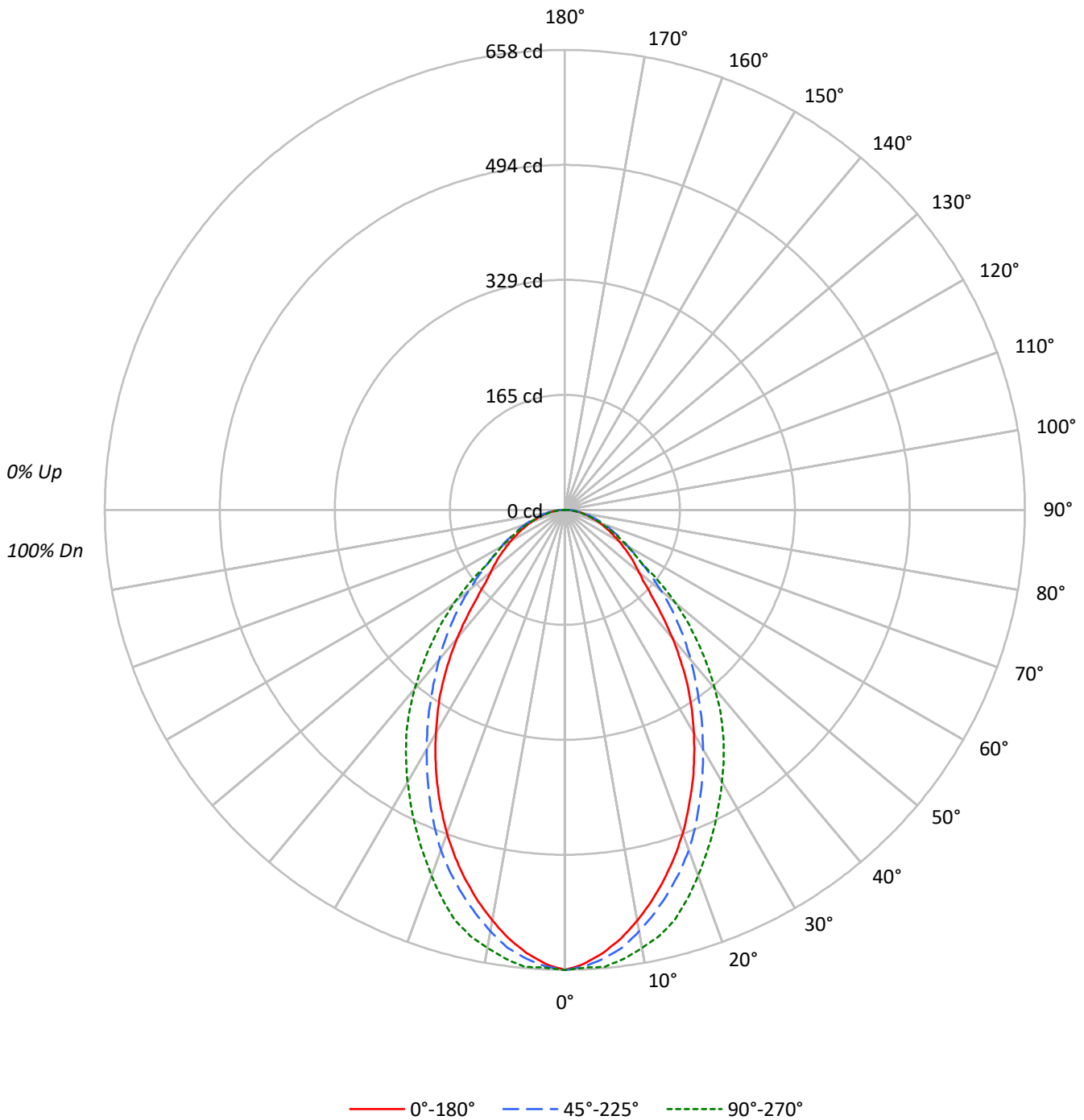
Lumens per Lamp: N/A
Luminaire Lumens: 1073.4 lumens
Efficiency: N/A
Efficacy: 54.8 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

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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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87
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	74	70	76	72	68	67
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	40	35	46	39	35	45	39	35	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12149	12149	12149
5°	11777	11934	12157
10°	11182	11475	11926
15°	10469	10860	11603
20°	9677	10176	10942
25°	8794	9313	10263
30°	7860	8418	9580
35°	6889	7544	8900
40°	5764	6737	8033
45°	4619	5968	7020
50°	3964	5141	5894
55°	3622	4372	4350
60°	3292	3868	3790
65°	3000	3462	3310
70°	2752	3172	2940
75°	2574	2930	2574
80°	2412	2710	2253
85°	2392	2858	1948

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7020 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.8	5.7
10°-20°	160.9	15.0
20°-30°	212.2	19.8
30°-40°	213.7	19.9
40°-50°	173.9	16.2
50°-60°	118.6	11.0
60°-70°	77.0	7.2
70°-80°	42.4	3.9
80°-90°	13.8	1.3
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°	433.9	40.4
0°-40°	647.7	60.3
0°-60°	940.2	87.6
0°-90°	1073.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1073.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	658	658	658	658	658	
5°	636	648	644	650	656	59
15°	548	562	568	592	607	154
25°	432	446	457	478	504	198
35°	306	321	335	364	395	190
45°	177	199	229	248	269	139
55°	113	124	136	137	135	101
65°	69	81	79	75	76	68
75°	36	45	41	37	36	38
85°	11	15	14	11	9	12
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	658.4	658.4	658.4	658.4	658.4
2.5°	649.9	660.5	653.5	654.2	655.6
5°	635.8	647.8	644.3	649.9	656.3
7.5°	618.1	630.1	631.5	640.0	647.8
10°	596.8	610.3	612.4	625.1	636.5
12.5°	573.5	588.3	591.2	609.6	624.4
15°	548.0	562.1	568.5	591.9	607.4
17.5°	521.1	534.5	544.4	565.7	583.4
20°	492.8	505.5	518.2	537.4	557.2
22.5°	462.3	476.5	488.5	507.6	530.3
25°	431.9	446.0	457.4	477.9	504.1
27.5°	400.7	414.9	426.2	448.1	476.5
30°	368.9	383.7	395.1	419.8	449.6
32.5°	337.7	352.6	365.3	391.5	422.7
35°	305.8	321.4	334.9	363.9	395.1
37.5°	271.9	289.6	306.6	335.6	366.0
40°	239.3	259.1	279.7	306.6	333.5
42.5°	206.7	228.7	254.2	276.8	301.6
45°	177.0	198.9	228.7	248.5	269.0
47.5°	153.6	172.0	203.9	220.2	238.6
50°	138.1	150.8	179.1	191.9	205.3
52.5°	125.3	135.9	155.8	164.3	171.3
55°	112.6	123.9	135.9	136.6	135.2
57.5°	99.8	112.6	118.9	114.0	116.8
60°	89.2	101.9	104.8	99.8	102.7
62.5°	77.9	92.0	92.0	87.1	88.5
65°	68.7	81.4	79.3	75.0	75.8
67.5°	59.5	72.2	68.7	64.4	64.4
70°	51.0	63.0	58.8	54.5	54.5
72.5°	43.2	53.1	50.3	45.3	44.6
75°	36.1	44.6	41.1	36.8	36.1
77.5°	29.0	36.1	33.3	29.7	28.3
80°	22.7	29.0	25.5	22.7	21.2
82.5°	17.0	21.9	19.1	16.3	14.9
85°	11.3	14.9	13.5	10.6	9.2
87.5°	5.7	9.9	8.5	7.1	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)