

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: P1057959

Luminaire Tested: S122RDR-S485D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057959
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-S485D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

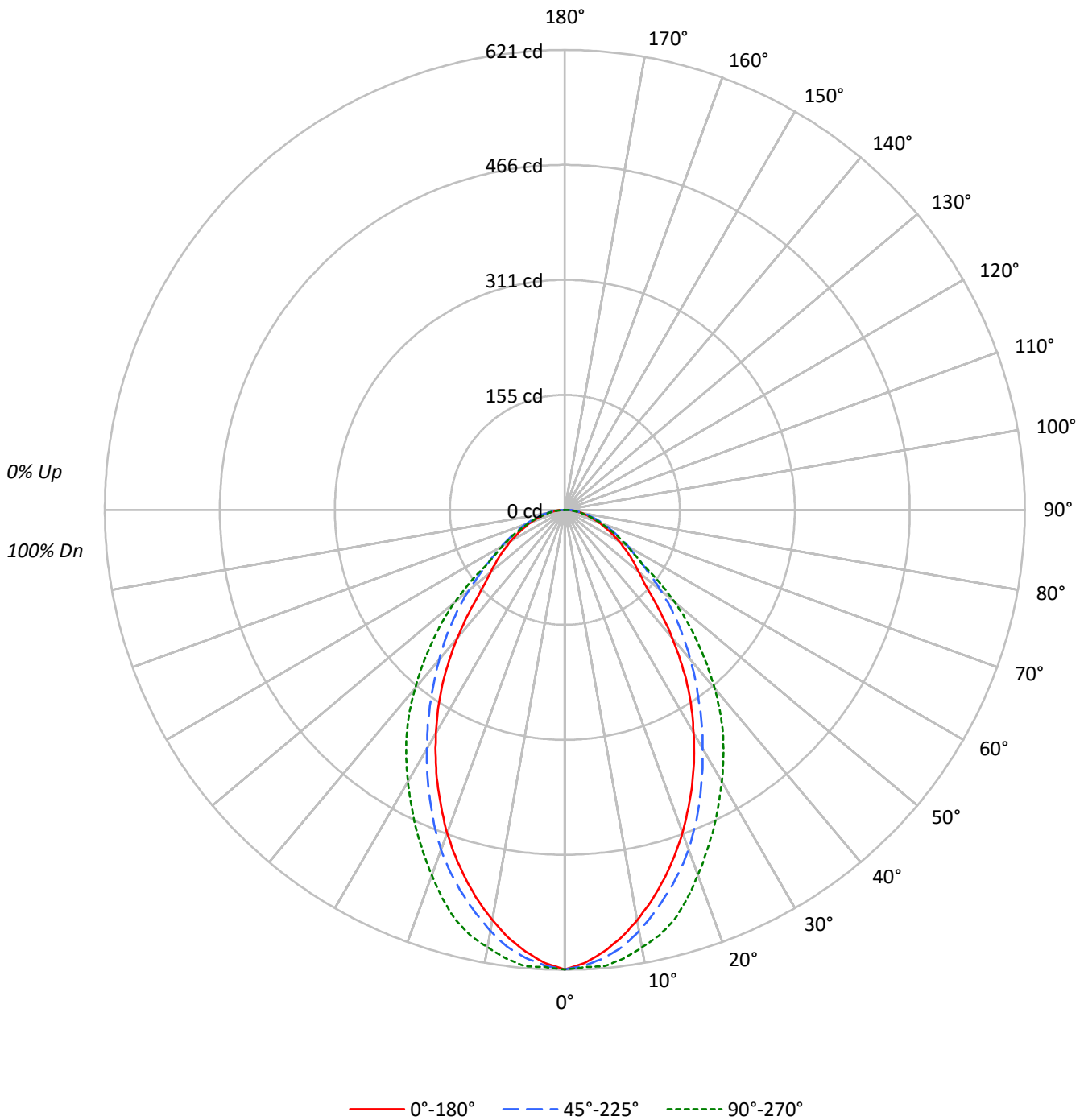
Lumens per Lamp: N/A
Luminaire Lumens: 1011.7 lumens
Efficiency: N/A
Efficacy: 51.6 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	103	100	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°	11452	11452	11452
5°	11099	11247	11458
10°	10540	10815	11240
15°	9867	10236	10937
20°	9119	9593	10313
25°	8289	8777	9673
30°	7408	7935	9028
35°	6494	7109	8389
40°	5432	6350	7571
45°	4353	5624	6618
50°	3735	4846	5555
55°	3413	4121	4102
60°	3104	3646	3572
65°	2825	3262	3117
70°	2590	2989	2773
75°	2424	2759	2424
80°	2274	2550	2125
85°	2265	2689	1842

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6618 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.3	5.7
10°-20°	151.7	15.0
20°-30°	200.0	19.8
30°-40°	201.4	19.9
40°-50°	163.9	16.2
50°-60°	111.8	11.0
60°-70°	72.6	7.2
70°-80°	39.9	3.9
80°-90°	13.0	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°	409.0	40.4
0°-40°	610.4	60.3
0°-60°	886.2	87.6
0°-90°	1011.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1011.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	621	621	621	621	621	
5°	599	611	607	613	619	56
15°	516	530	536	558	572	145
25°	407	420	431	450	475	187
35°	288	303	316	343	372	179
45°	167	188	216	234	254	131
55°	106	117	128	129	128	95
65°	65	77	75	71	71	64
75°	34	42	39	35	34	36
85°	11	14	13	10	9	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	620.6	620.6	620.6	620.6	620.6
2.5°	612.6	622.6	615.9	616.6	617.9
5°	599.2	610.6	607.2	612.6	618.6
7.5°	582.6	593.9	595.2	603.2	610.6
10°	562.5	575.2	577.2	589.2	599.9
12.5°	540.5	554.5	557.2	574.5	588.6
15°	516.5	529.8	535.8	557.9	572.5
17.5°	491.1	503.8	513.2	533.2	549.9
20°	464.4	476.4	488.5	506.5	525.2
22.5°	435.7	449.1	460.4	478.5	499.8
25°	407.1	420.4	431.1	450.4	475.1
27.5°	377.7	391.0	401.7	422.4	449.1
30°	347.7	361.7	372.4	395.7	423.7
32.5°	318.3	332.3	344.3	369.0	398.4
35°	288.3	303.0	315.6	343.0	372.4
37.5°	256.2	272.9	288.9	316.3	345.0
40°	225.5	244.2	263.6	288.9	314.3
42.5°	194.9	215.5	239.6	260.9	284.3
45°	166.8	187.5	215.5	234.2	253.6
47.5°	144.8	162.2	192.2	207.5	224.9
50°	130.1	142.1	168.8	180.8	193.5
52.5°	118.1	128.1	146.8	154.8	161.5
55°	106.1	116.8	128.1	128.8	127.5
57.5°	94.1	106.1	112.1	107.4	110.1
60°	84.1	96.1	98.8	94.1	96.8
62.5°	73.4	86.7	86.7	82.1	83.4
65°	64.7	76.7	74.7	70.7	71.4
67.5°	56.1	68.1	64.7	60.7	60.7
70°	48.0	59.4	55.4	51.4	51.4
72.5°	40.7	50.0	47.4	42.7	42.0
75°	34.0	42.0	38.7	34.7	34.0
77.5°	27.4	34.0	31.4	28.0	26.7
80°	21.4	27.4	24.0	21.4	20.0
82.5°	16.0	20.7	18.0	15.3	14.0
85°	10.7	14.0	12.7	10.0	8.7
87.5°	5.3	9.3	8.0	6.7	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)