

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: P1057795

Luminaire Tested: S122RDR-S1005D830-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057795
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S1005D830-X4F0-XX-UDD-WVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

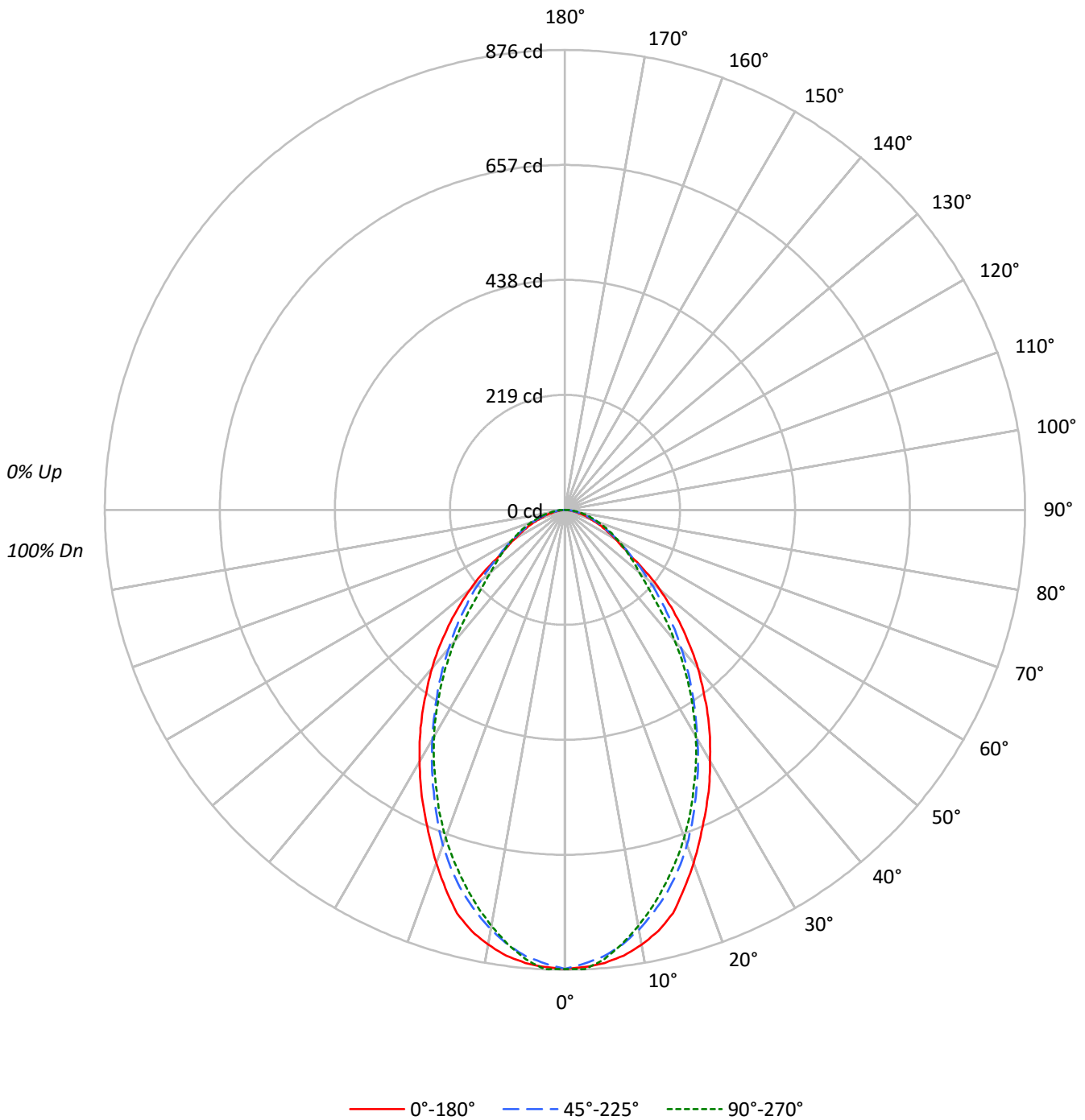
Lumens per Lamp: N/A
Luminaire Lumens: 1328.1 lumens
Efficiency: N/A
Efficacy: 31.8 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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				100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77				77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61				61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54				54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49				49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44				44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41				41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37				37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34				34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16137	16137	16137
5°	16045	15811	15915
10°	15760	15211	15082
15°	15189	14393	14098
20°	14056	13345	13043
25°	12900	12049	11823
30°	11779	10741	10622
35°	10666	9504	9285
40°	9493	8286	7850
45°	8176	7122	6286
50°	6755	5997	5276
55°	4884	4974	4748
60°	4060	4266	4318
65°	3467	3707	3951
70°	2854	3307	3604
75°	2381	2780	3280
80°	1775	2221	2965
85°	593	1186	2646

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8176 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.8	6.1
10°-20°	212.9	16.0
20°-30°	275.5	20.7
30°-40°	270.2	20.3
40°-50°	212.8	16.0
50°-60°	139.5	10.5
60°-70°	84.9	6.4
70°-80°	42.4	3.2
80°-90°	9.1	0.7
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°	569.2	42.9
0°-40°	839.4	63.2
0°-60°	1191.6	89.7
0°-90°	1328.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1328.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	874	874	874	874	874	
5°	866	866	854	859	859	82
15°	795	784	753	744	738	221
25°	634	613	592	589	581	291
35°	474	447	422	420	412	295
45°	313	294	273	253	241	241
55°	152	160	155	149	148	144
65°	79	81	85	89	90	79
75°	33	35	39	45	46	36
85°	3	4	6	10	12	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	874.5	874.5	874.5	874.5	874.5
2.5°	871.7	873.1	864.8	873.1	875.9
5°	866.2	866.2	853.6	859.2	859.2
7.5°	856.4	855.0	835.5	835.5	834.1
10°	841.1	835.5	811.8	807.7	804.9
12.5°	821.6	811.8	784.0	777.0	772.9
15°	795.1	784.0	753.4	743.6	738.0
17.5°	756.1	745.0	718.5	707.4	701.8
20°	715.8	699.1	679.6	669.8	664.2
22.5°	674.0	654.5	636.4	629.4	623.9
25°	633.6	612.7	591.8	589.0	580.7
27.5°	594.6	569.5	548.7	547.3	540.3
30°	552.8	526.4	504.1	505.5	498.5
32.5°	513.8	488.8	462.3	463.7	455.4
35°	473.5	447.0	421.9	420.5	412.2
37.5°	431.7	406.6	382.9	377.4	369.0
40°	394.1	369.0	344.0	334.2	325.9
42.5°	353.7	331.4	309.1	293.8	282.7
45°	313.3	293.8	272.9	253.4	240.9
47.5°	274.3	259.0	240.9	217.2	208.9
50°	235.3	224.2	208.9	188.0	183.8
52.5°	195.0	190.8	181.0	167.1	165.7
55°	151.8	160.1	154.6	149.0	147.6
57.5°	128.1	129.5	133.7	132.3	132.3
60°	110.0	110.0	115.6	117.0	117.0
62.5°	93.3	94.7	100.3	103.0	103.0
65°	79.4	80.8	84.9	89.1	90.5
67.5°	65.4	68.2	72.4	76.6	78.0
70°	52.9	55.7	61.3	65.4	66.8
72.5°	43.2	44.6	50.1	54.3	55.7
75°	33.4	34.8	39.0	44.6	46.0
77.5°	23.7	26.5	30.6	34.8	37.6
80°	16.7	18.1	20.9	26.5	27.9
82.5°	9.7	11.1	13.9	18.1	19.5
85°	2.8	4.2	5.6	9.7	12.5
87.5°	0.0	0.0	0.0	2.8	5.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)