

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: P1057804

Luminaire Tested: S122RDR-S1005D835-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057804
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-S1005D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

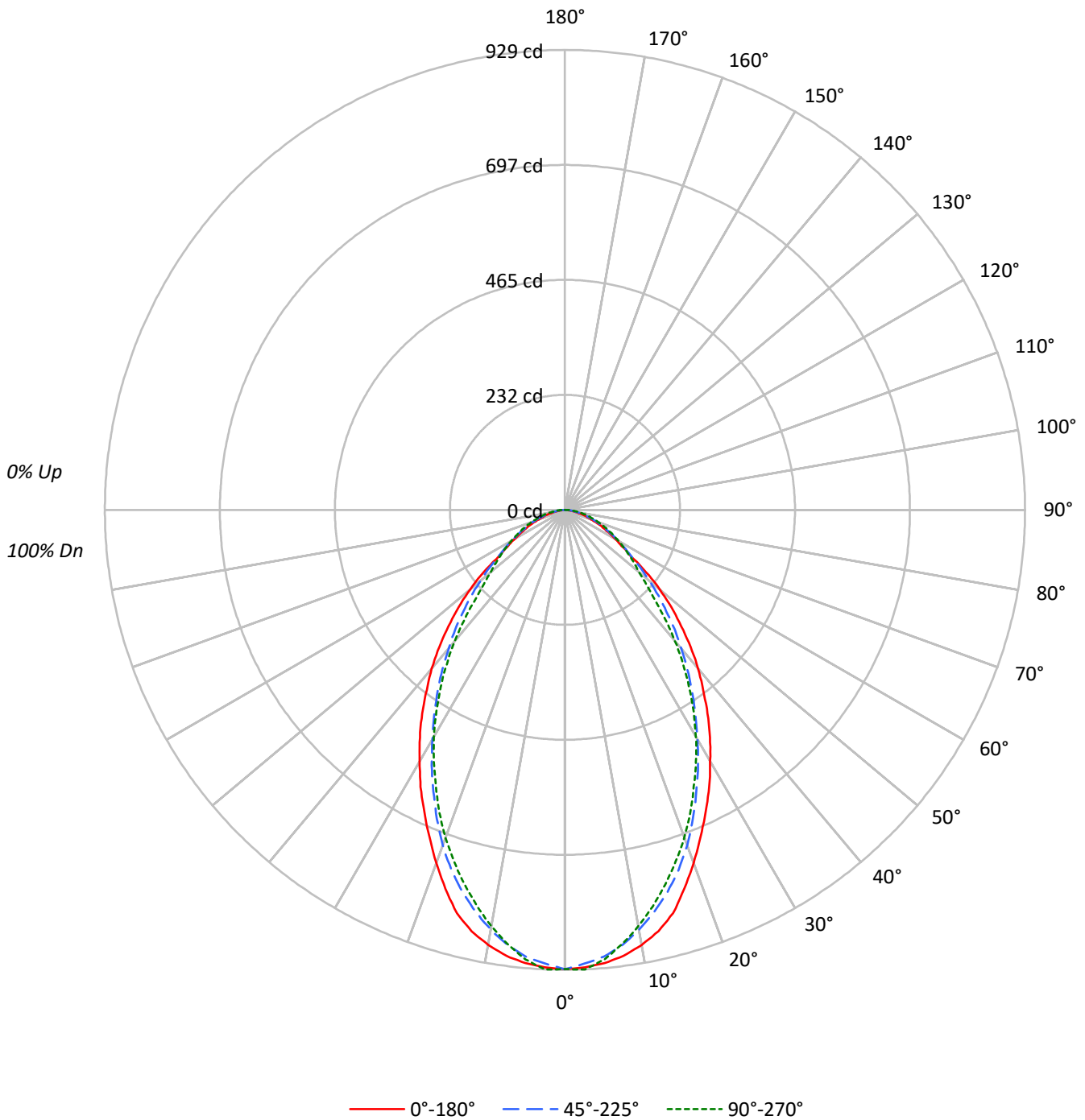
Lumens per Lamp: N/A
Luminaire Lumens: 1409.1 lumens
Efficiency: N/A
Efficacy: 33.7 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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°	17120	17120	17120
5°	17023	16776	16886
10°	16721	16138	16002
15°	16116	15269	14958
20°	14912	14158	13838
25°	13686	12784	12544
30°	12497	11395	11269
35°	11315	10085	9851
40°	10071	8790	8327
45°	8674	7557	6670
50°	7168	6361	5598
55°	5180	5276	5038
60°	4307	4525	4580
65°	3676	3934	4192
70°	3027	3507	3825
75°	2531	2952	3479
80°	1881	2359	3135
85°	635	1249	2816

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8674 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.7	6.1
10°-20°	225.9	16.0
20°-30°	292.3	20.7
30°-40°	286.7	20.3
40°-50°	225.7	16.0
50°-60°	148.0	10.5
60°-70°	90.1	6.4
70°-80°	45.0	3.2
80°-90°	9.7	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°	603.9	42.9
0°-40°	890.6	63.2
0°-60°	1264.3	89.7
0°-90°	1409.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1409.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	928	928	928	928	928	
5°	919	919	906	912	912	87
15°	844	832	799	789	783	235
25°	672	650	628	625	616	309
35°	502	474	448	446	437	313
45°	332	312	290	269	256	256
55°	161	170	164	158	157	153
65°	84	86	90	95	96	84
75°	36	37	41	47	49	38
85°	3	4	6	10	13	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	927.8	927.8	927.8	927.8	927.8
2.5°	924.9	926.3	917.5	926.3	929.3
5°	919.0	919.0	905.7	911.6	911.6
7.5°	908.6	907.1	886.5	886.5	885.0
10°	892.4	886.5	861.3	856.9	854.0
12.5°	871.7	861.3	831.8	824.4	820.0
15°	843.6	831.8	799.3	788.9	783.0
17.5°	802.2	790.4	762.4	750.5	744.6
20°	759.4	741.7	721.0	710.6	704.7
22.5°	715.1	694.4	675.2	667.8	661.9
25°	672.2	650.1	627.9	625.0	616.1
27.5°	630.9	604.3	582.1	580.6	573.2
30°	586.5	558.5	534.8	536.3	528.9
32.5°	545.2	518.6	490.5	492.0	483.1
35°	502.3	474.3	447.7	446.2	437.3
37.5°	458.0	431.4	406.3	400.4	391.5
40°	418.1	391.5	364.9	354.6	345.7
42.5°	375.3	351.6	328.0	311.7	299.9
45°	332.4	311.7	289.6	268.9	255.6
47.5°	291.1	274.8	255.6	230.5	221.6
50°	249.7	237.9	221.6	199.5	195.0
52.5°	206.8	202.4	192.1	177.3	175.8
55°	161.0	169.9	164.0	158.1	156.6
57.5°	135.9	137.4	141.8	140.4	140.4
60°	116.7	116.7	122.6	124.1	124.1
62.5°	99.0	100.5	106.4	109.3	109.3
65°	84.2	85.7	90.1	94.6	96.0
67.5°	69.4	72.4	76.8	81.3	82.7
70°	56.1	59.1	65.0	69.4	70.9
72.5°	45.8	47.3	53.2	57.6	59.1
75°	35.5	36.9	41.4	47.3	48.8
77.5°	25.1	28.1	32.5	36.9	39.9
80°	17.7	19.2	22.2	28.1	29.5
82.5°	10.3	11.8	14.8	19.2	20.7
85°	3.0	4.4	5.9	10.3	13.3
87.5°	0.0	0.0	0.0	3.0	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)