

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: P1058004

Luminaire Tested: S122RDR-S485D930-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058004
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-S485D930-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, 90 CRI LEDS
Ballast/Driver: -

Summary

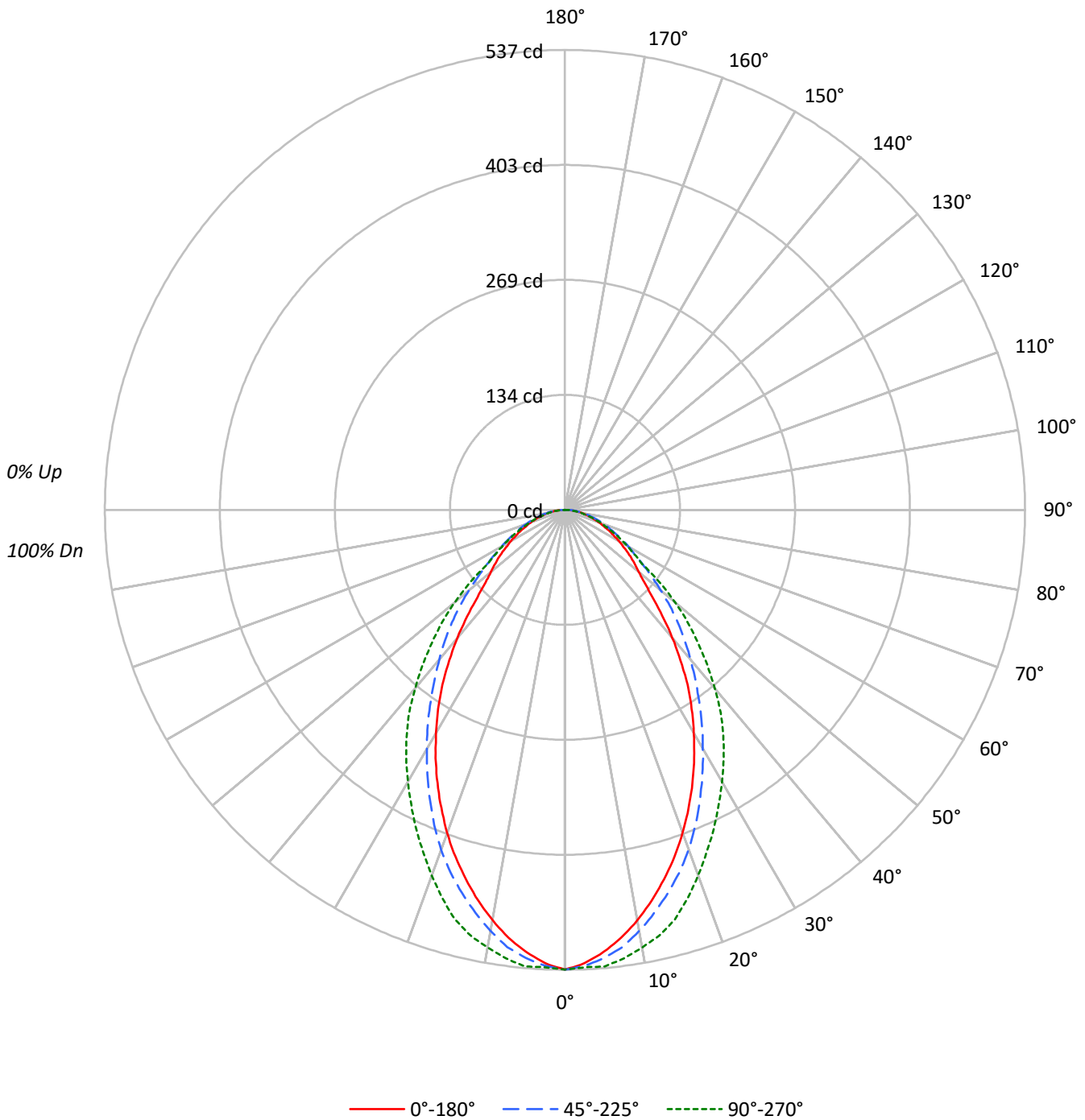
Lumens per Lamp: N/A
Luminaire Lumens: 875.1 lumens
Efficiency: N/A
Efficacy: 44.6 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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°	9905	9905	9905
5°	9600	9730	9912
10°	9117	9355	9723
15°	8535	8854	9460
20°	7888	8297	8921
25°	7169	7592	8368
30°	6407	6863	7809
35°	5618	6150	7256
40°	4700	5492	6550
45°	3766	4864	5723
50°	3232	4191	4806
55°	2953	3565	3545
60°	2683	3152	3089
65°	2445	2821	2698
70°	2244	2584	2395
75°	2096	2388	2096
80°	1966	2210	1838
85°	1948	2329	1588

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5723 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.5	5.7
10°-20°	131.2	15.0
20°-30°	173.0	19.8
30°-40°	174.2	19.9
40°-50°	141.8	16.2
50°-60°	96.7	11.0
60°-70°	62.8	7.2
70°-80°	34.6	3.9
80°-90°	11.3	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°	353.8	40.4
0°-40°	528.0	60.3
0°-60°	766.5	87.6
0°-90°	875.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	875.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	537	537	537	537	537	
5°	518	528	525	530	535	48
15°	447	458	464	482	495	125
25°	352	364	373	390	411	161
35°	249	262	273	297	322	155
45°	144	162	186	203	219	114
55°	92	101	111	111	110	82
65°	56	66	65	61	62	56
75°	29	36	34	30	29	31
85°	9	12	11	9	8	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	536.8	536.8	536.8	536.8	536.8
2.5°	529.9	538.5	532.8	533.3	534.5
5°	518.3	528.1	525.3	529.9	535.1
7.5°	503.9	513.7	514.9	521.8	528.1
10°	486.6	497.6	499.3	509.7	518.9
12.5°	467.5	479.7	482.0	497.0	509.1
15°	446.8	458.3	463.5	482.5	495.2
17.5°	424.8	435.8	443.9	461.2	475.6
20°	401.7	412.1	422.5	438.1	454.3
22.5°	376.9	388.5	398.3	413.9	432.3
25°	352.1	363.6	372.9	389.6	411.0
27.5°	326.7	338.2	347.5	365.4	388.5
30°	300.7	312.8	322.1	342.3	366.5
32.5°	275.3	287.5	297.8	319.2	344.6
35°	249.4	262.1	273.0	296.7	322.1
37.5°	221.6	236.1	249.9	273.6	298.4
40°	195.1	211.3	228.0	249.9	271.9
42.5°	168.5	186.4	207.2	225.7	245.9
45°	144.3	162.2	186.4	202.6	219.3
47.5°	125.3	140.3	166.2	179.5	194.5
50°	112.6	122.9	146.0	156.4	167.4
52.5°	102.2	110.8	127.0	133.9	139.7
55°	91.8	101.0	110.8	111.4	110.2
57.5°	81.4	91.8	97.0	92.9	95.2
60°	72.7	83.1	85.4	81.4	83.7
62.5°	63.5	75.0	75.0	71.0	72.2
65°	56.0	66.4	64.6	61.2	61.8
67.5°	48.5	58.9	56.0	52.5	52.5
70°	41.6	51.4	47.9	44.4	44.4
72.5°	35.2	43.3	41.0	36.9	36.4
75°	29.4	36.4	33.5	30.0	29.4
77.5°	23.7	29.4	27.1	24.2	23.1
80°	18.5	23.7	20.8	18.5	17.3
82.5°	13.9	17.9	15.6	13.3	12.1
85°	9.2	12.1	11.0	8.7	7.5
87.5°	4.6	8.1	6.9	5.8	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)