

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: P1058151

Luminaire Tested: S122RDR-S865D927-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058151
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S865D927-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

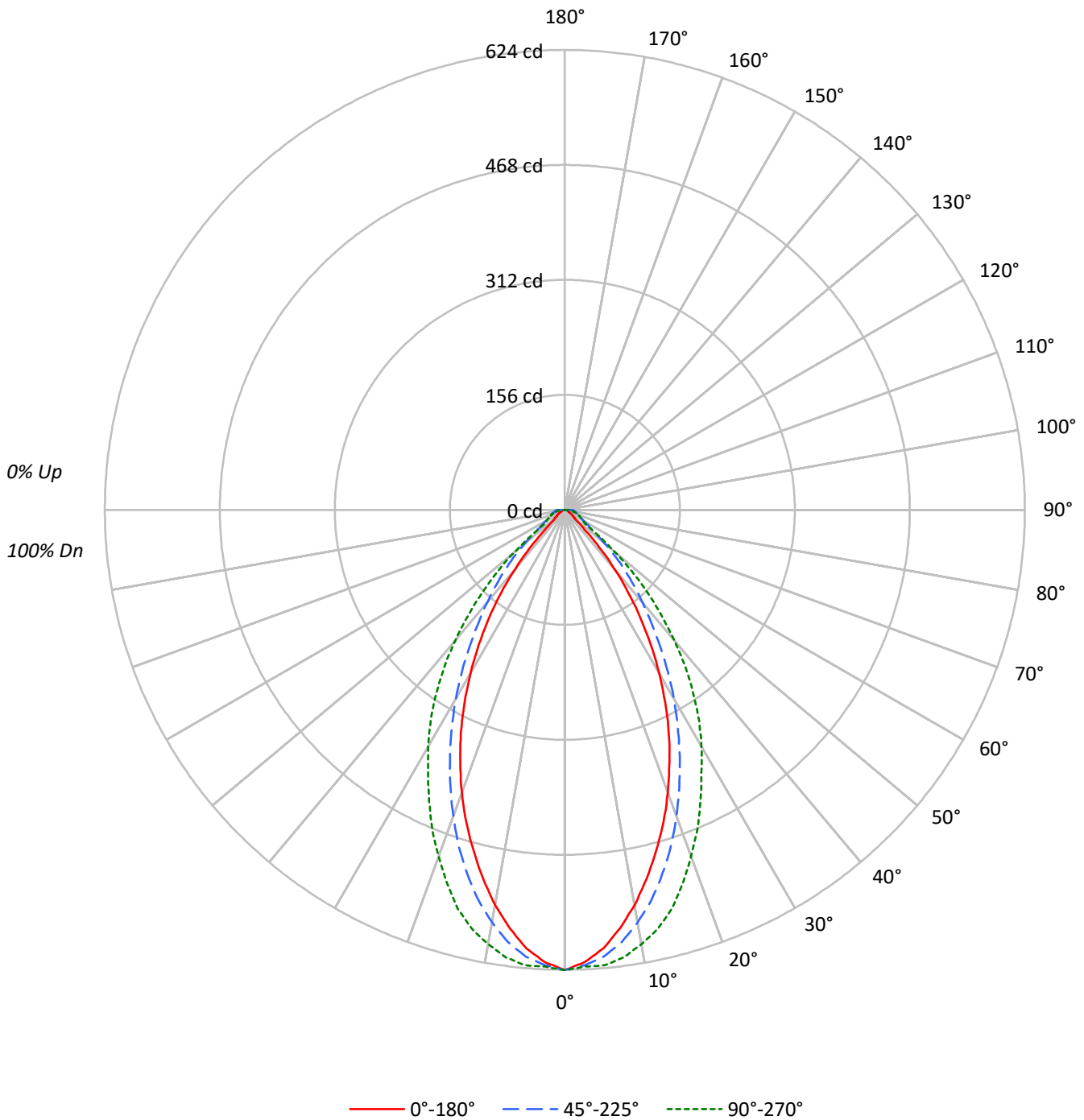
Lumens per Lamp: N/A
Luminaire Lumens: 679.6 lumens
Efficiency: N/A
Efficacy: 19.4 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90				
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	73				
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67				
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61				
6	82	71	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56				
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52				
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48				
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45				
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11520	11520	11520
5°	11064	11268	11490
10°	10200	10650	11210
15°	9141	9769	10706
20°	8022	8689	9826
25°	6792	7505	8867
30°	5448	6301	7896
35°	4028	5039	6841
40°	2527	3946	5557
45°	992	2972	4118
50°	488	2007	2523
55°	386	1319	1126
60°	295	1070	1033
65°	218	1004	1004
70°	270	1025	1025
75°	285	1141	1069
80°	425	1488	1169
85°	847	2541	1694

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 4653 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.0	8.4
10°-20°	144.2	21.2
20°-30°	172.5	25.4
30°-40°	145.1	21.4
40°-50°	82.6	12.2
50°-60°	32.6	4.8
60°-70°	20.5	3.0
70°-80°	15.3	2.2
80°-90°	9.7	1.4
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°	373.6	55.0
0°-40°	518.8	76.3
0°-60°	634.0	93.3
0°-90°	679.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	679.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	624	624	624	624	624	
5°	597	610	608	615	620	55
15°	478	495	511	541	560	134
25°	334	349	369	406	436	152
35°	179	195	224	272	304	111
45°	38	67	114	143	158	36
55°	12	26	41	42	35	11
65°	5	23	23	22	23	6
75°	4	16	16	15	15	4
85°	4	11	12	11	8	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	624.3	624.3	624.3	624.3	624.3
2.5°	614.3	625.3	618.3	619.3	620.3
5°	597.3	610.3	608.3	615.3	620.3
7.5°	572.4	586.3	591.3	603.3	612.3
10°	544.4	560.4	568.4	587.3	598.3
12.5°	512.4	530.4	542.4	566.4	582.3
15°	478.5	495.4	511.4	541.4	560.4
17.5°	444.5	461.5	478.5	511.4	531.4
20°	408.5	424.5	442.5	477.5	500.4
22.5°	370.6	387.6	405.5	441.5	469.5
25°	333.6	348.6	368.6	406.5	435.5
27.5°	294.7	309.7	331.6	370.6	401.5
30°	255.7	270.7	295.7	335.6	370.6
32.5°	216.8	232.7	259.7	303.7	338.6
35°	178.8	194.8	223.7	271.7	303.7
37.5°	141.8	159.8	191.8	238.7	268.7
40°	104.9	125.9	163.8	205.8	230.7
42.5°	69.9	95.9	137.8	172.8	193.8
45°	38.0	66.9	113.9	142.8	157.8
47.5°	21.0	43.0	90.9	113.9	122.9
50°	17.0	30.0	69.9	86.9	87.9
52.5°	14.0	27.0	51.9	61.9	56.9
55°	12.0	26.0	41.0	42.0	35.0
57.5°	10.0	25.0	34.0	30.0	30.0
60°	8.0	25.0	29.0	27.0	28.0
62.5°	6.0	25.0	26.0	24.0	25.0
65°	5.0	23.0	23.0	22.0	23.0
67.5°	5.0	21.0	21.0	20.0	21.0
70°	5.0	20.0	19.0	19.0	19.0
72.5°	4.0	18.0	18.0	17.0	17.0
75°	4.0	16.0	16.0	15.0	15.0
77.5°	4.0	15.0	15.0	14.0	13.0
80°	4.0	13.0	14.0	13.0	11.0
82.5°	4.0	12.0	13.0	12.0	9.0
85°	4.0	11.0	12.0	11.0	8.0
87.5°	3.0	11.0	11.0	9.0	6.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)