

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: P1058124

Luminaire Tested: S122RDR-S865D835-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058124
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-S865D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

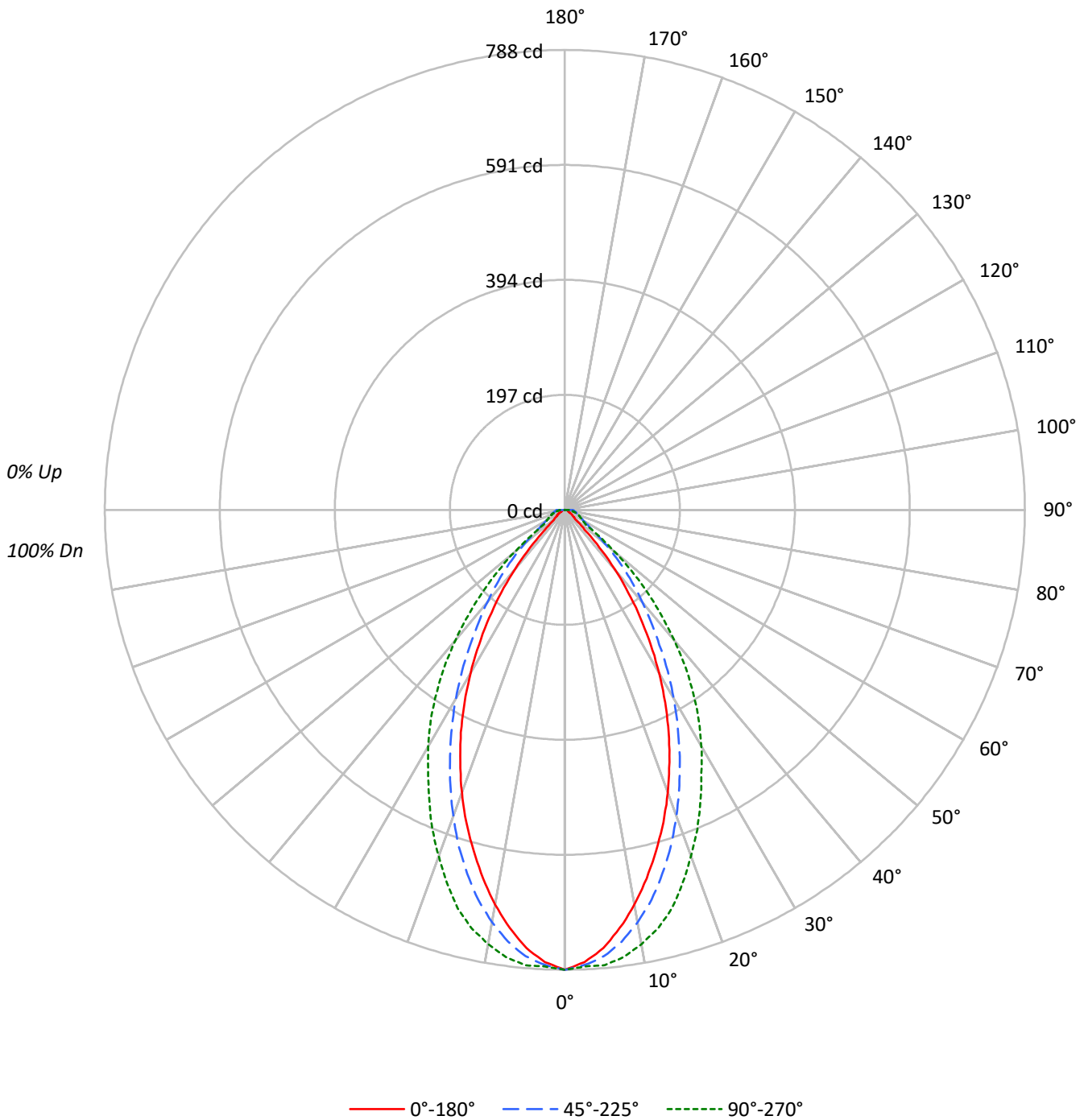
Lumens per Lamp: N/A
Luminaire Lumens: 857.8 lumens
Efficiency: N/A
Efficacy: 24.5 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	74				
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	72	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°	14542	14542	14542
5°	13966	14224	14503
10°	12876	13444	14152
15°	11538	12333	13514
20°	10127	10969	12405
25°	8574	9474	11194
30°	6878	7952	9967
35°	5084	6361	8634
40°	3189	4981	7017
45°	1250	3750	5198
50°	614	2535	3186
55°	486	1663	1419
60°	373	1351	1303
65°	275	1266	1266
70°	340	1295	1295
75°	356	1440	1347
80°	531	1881	1477
85°	1059	3197	2138

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 5880 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.0	8.4
10°-20°	182.0	21.2
20°-30°	217.7	25.4
30°-40°	183.2	21.4
40°-50°	104.3	12.2
50°-60°	41.1	4.8
60°-70°	25.9	3.0
70°-80°	19.3	2.2
80°-90°	12.3	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°	471.6	55.0
0°-40°	654.9	76.3
0°-60°	800.3	93.3
0°-90°	857.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	857.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	788	788	788	788	788	
5°	754	770	768	777	783	70
15°	604	625	646	683	707	169
25°	421	440	465	513	550	192
35°	226	246	282	343	383	140
45°	48	84	144	180	199	45
55°	15	33	52	53	44	14
65°	6	29	29	28	29	7
75°	5	20	20	19	19	5
85°	5	14	15	14	10	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	788.1	788.1	788.1	788.1	788.1
2.5°	775.5	789.3	780.5	781.8	783.0
5°	754.0	770.4	767.9	776.7	783.0
7.5°	722.5	740.2	746.5	761.6	772.9
10°	687.2	707.4	717.5	741.4	755.3
12.5°	646.9	669.5	684.7	714.9	735.1
15°	604.0	625.4	645.6	683.4	707.4
17.5°	561.1	582.5	604.0	645.6	670.8
20°	515.7	535.9	558.6	602.7	631.7
22.5°	467.8	489.2	511.9	557.3	592.6
25°	421.1	440.1	465.3	513.2	549.8
27.5°	372.0	390.9	418.6	467.8	506.9
30°	322.8	341.7	373.2	423.7	467.8
32.5°	273.6	293.8	327.8	383.3	427.5
35°	225.7	245.9	282.4	343.0	383.3
37.5°	179.1	201.7	242.1	301.4	339.2
40°	132.4	158.9	206.8	259.7	291.3
42.5°	88.3	121.0	174.0	218.1	244.6
45°	47.9	84.5	143.7	180.3	199.2
47.5°	26.5	54.2	114.7	143.7	155.1
50°	21.4	37.8	88.3	109.7	111.0
52.5°	17.7	34.0	65.6	78.2	71.9
55°	15.1	32.8	51.7	53.0	44.1
57.5°	12.6	31.5	42.9	37.8	37.8
60°	10.1	31.5	36.6	34.0	35.3
62.5°	7.6	31.5	32.8	30.3	31.5
65°	6.3	29.0	29.0	27.7	29.0
67.5°	6.3	26.5	26.5	25.2	26.5
70°	6.3	25.2	24.0	24.0	24.0
72.5°	5.0	22.7	22.7	21.4	21.4
75°	5.0	20.2	20.2	18.9	18.9
77.5°	5.0	18.9	18.9	17.7	16.4
80°	5.0	16.4	17.7	16.4	13.9
82.5°	5.0	15.1	16.4	15.1	11.3
85°	5.0	13.9	15.1	13.9	10.1
87.5°	3.8	13.9	13.9	11.3	7.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)