

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: P1058120

Luminaire Tested: S122RDR-S865D830-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058120
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S865D830-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

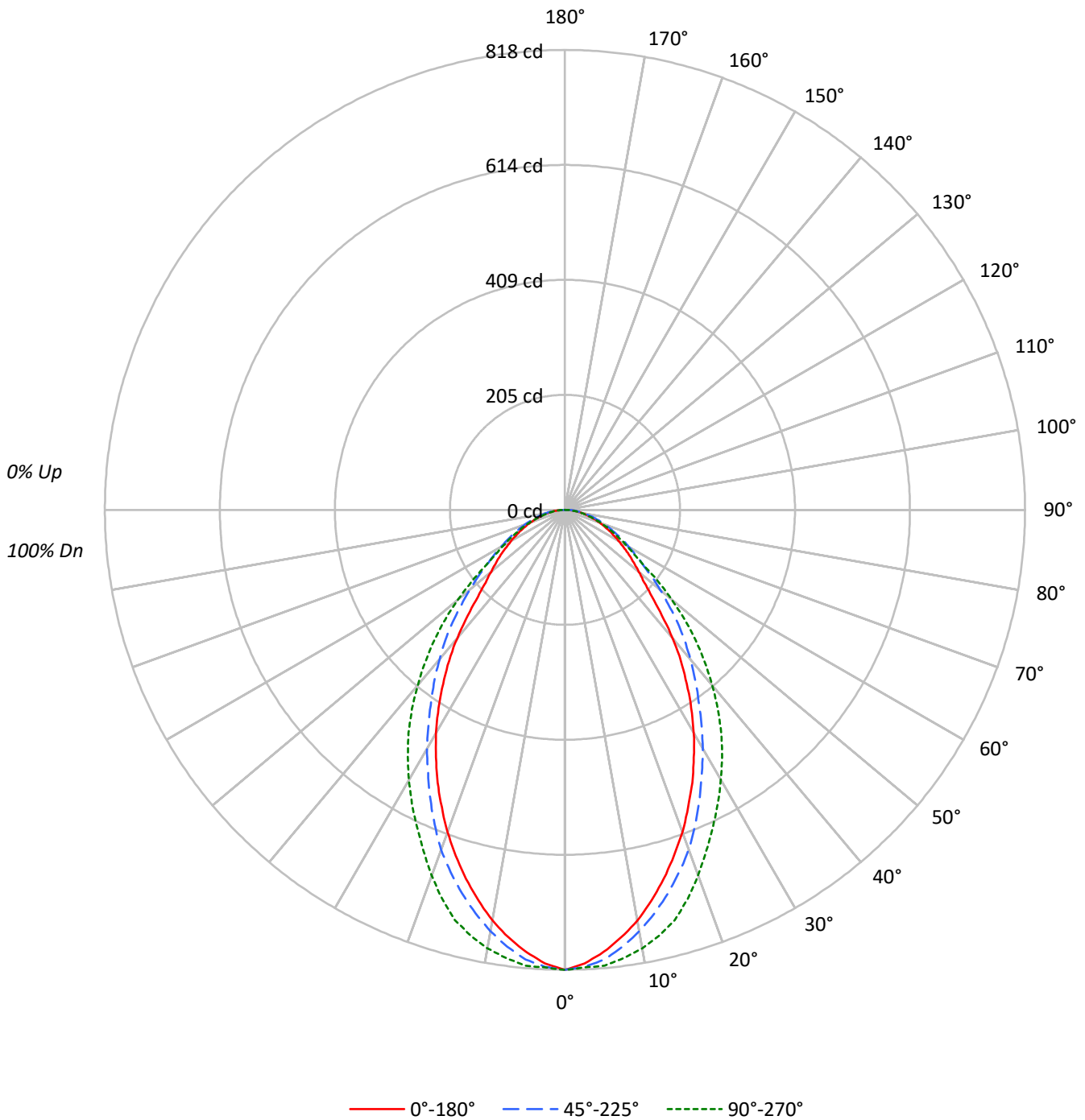
Lumens per Lamp: N/A
Luminaire Lumens: 1332.2 lumens
Efficiency: N/A
Efficacy: 38.1 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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	79	84	80	78	76				
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66				
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59				
5	81	70	62	56	79	69	61	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	45	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	39	35	45	39	35	45	39	34	44	38	34	33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15096	15096	15096
5°	14626	14868	15067
10°	13905	14261	14840
15°	12975	13497	14427
20°	11984	12638	13594
25°	10903	11532	12668
30°	9765	10449	11815
35°	8506	9335	10914
40°	7178	8351	9811
45°	5702	7375	8583
50°	4909	6341	7125
55°	4469	5424	5463
60°	4074	4820	4646
65°	3733	4353	4096
70°	3458	4036	3653
75°	3215	3807	3215
80°	3029	3655	2901
85°	3006	3769	2519

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8583 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.5	5.7
10°-20°	199.7	15.0
20°-30°	262.7	19.7
30°-40°	264.2	19.8
40°-50°	214.1	16.1
50°-60°	147.5	11.1
60°-70°	96.5	7.2
70°-80°	53.8	4.0
80°-90°	18.2	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°	537.9	40.4
0°-40°	802.1	60.2
0°-60°	1163.7	87.4
0°-90°	1332.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1332.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	818	818	818	818	818	
5°	790	805	803	806	813	74
15°	679	696	706	733	755	190
25°	536	550	566	591	622	245
35°	378	395	414	451	484	236
45°	218	243	283	308	329	173
55°	139	154	169	172	170	125
65°	86	102	100	95	94	85
75°	45	56	53	48	45	48
85°	14	19	18	15	12	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	818.1	818.1	818.1	818.1	818.1
2.5°	807.4	821.7	813.4	813.4	814.6
5°	789.6	805.1	802.7	806.2	813.4
7.5°	767.1	783.7	783.7	794.4	803.9
10°	742.1	758.7	761.1	777.7	792.0
12.5°	711.2	727.9	735.0	756.4	775.4
15°	679.2	695.8	706.5	732.6	755.2
17.5°	644.8	661.4	675.6	702.9	725.5
20°	610.3	625.8	643.6	667.3	692.3
22.5°	572.3	588.9	605.6	628.1	656.6
25°	535.5	549.8	566.4	591.3	622.2
27.5°	496.3	511.8	527.2	556.9	588.9
30°	458.3	473.8	490.4	521.3	554.5
32.5°	418.0	434.6	451.2	485.6	520.1
35°	377.6	395.4	414.4	451.2	484.5
37.5°	338.4	357.4	380.0	418.0	446.5
40°	298.0	318.2	346.7	380.0	407.3
42.5°	255.3	280.2	314.7	343.2	368.1
45°	218.5	243.4	282.6	307.5	328.9
47.5°	191.2	211.4	249.4	270.7	288.5
50°	171.0	186.4	220.9	236.3	248.2
52.5°	154.4	169.8	193.5	204.2	207.8
55°	138.9	154.4	168.6	172.2	169.8
57.5°	123.5	140.1	148.4	144.9	144.9
60°	110.4	128.2	130.6	125.9	125.9
62.5°	97.4	115.2	115.2	109.2	109.2
65°	85.5	102.1	99.7	95.0	93.8
67.5°	74.8	90.2	86.7	81.9	80.7
70°	64.1	78.4	74.8	68.9	67.7
72.5°	54.6	67.7	62.9	58.2	55.8
75°	45.1	55.8	53.4	47.5	45.1
77.5°	36.8	45.1	42.7	38.0	35.6
80°	28.5	35.6	34.4	29.7	27.3
82.5°	21.4	27.3	26.1	22.6	19.0
85°	14.2	19.0	17.8	15.4	11.9
87.5°	7.1	13.1	11.9	10.7	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)