

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: P1058179

Luminaire Tested: S122RDR-S865D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058179
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S865D940-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

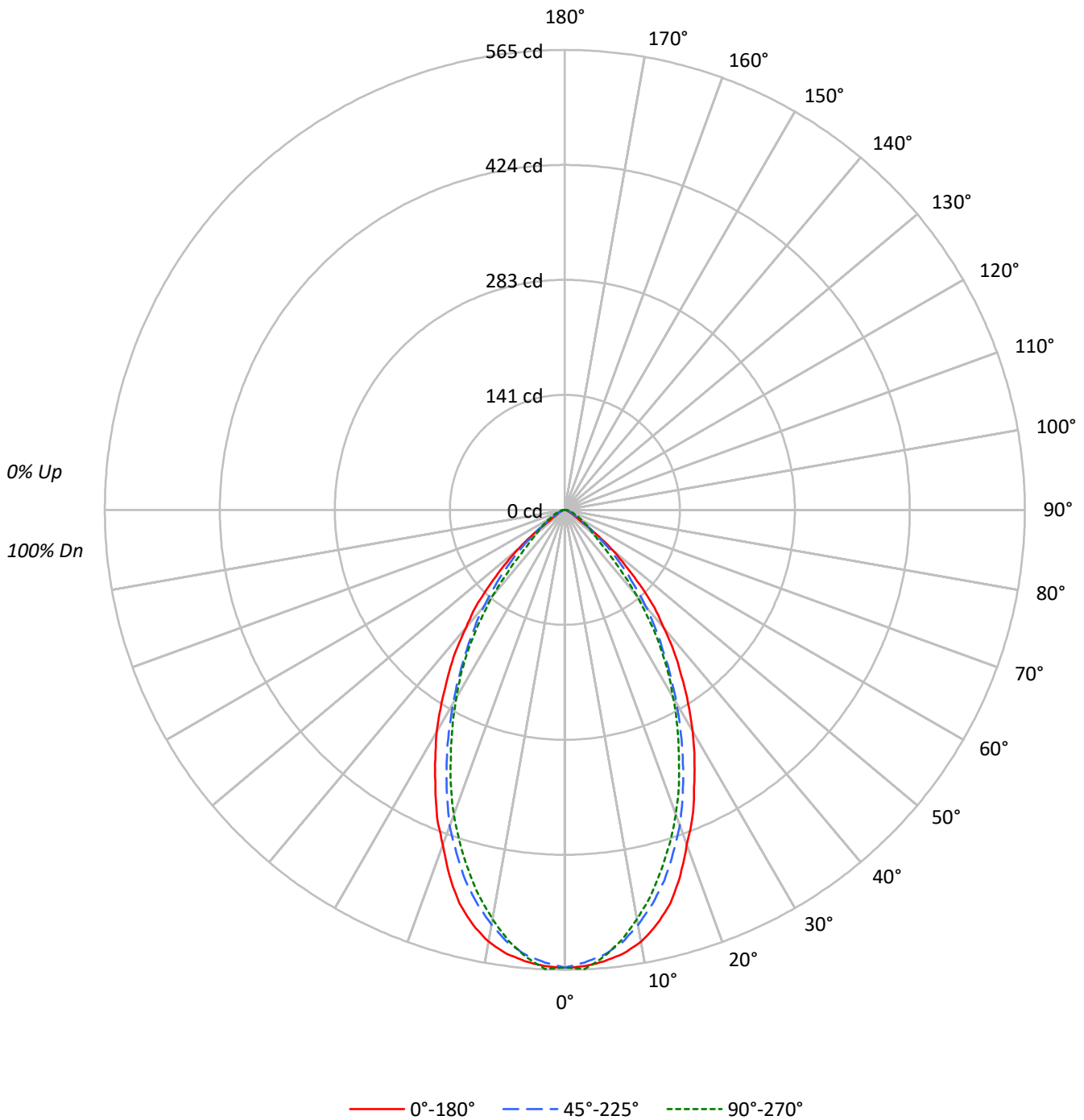
Lumens per Lamp: N/A
Luminaire Lumens: 604.8 lumens
Efficiency: N/A
Efficacy: 17.3 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10378	10378	10378
5°	10312	10167	10208
10°	10096	9696	9569
15°	9563	9005	8749
20°	8597	8112	7825
25°	7655	6994	6741
30°	6697	5836	5668
35°	5638	4728	4577
40°	4543	3731	3298
45°	3398	2696	1962
50°	2127	1740	1289
55°	721	939	1049
60°	413	579	827
65°	293	393	637
70°	243	302	486
75°	157	242	399
80°	117	234	361
85°	0	0	233

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3398 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.8	8.6
10°-20°	132.7	21.9
20°-30°	159.8	26.4
30°-40°	136.5	22.6
40°-50°	80.0	13.2
50°-60°	28.9	4.8
60°-70°	10.3	1.7
70°-80°	4.1	0.7
80°-90°	0.7	0.1
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°	344.3	56.9
0°-40°	480.8	79.5
0°-60°	589.7	97.5
0°-90°	604.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	604.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	562	562	562	562	562	
5°	557	558	549	551	551	53
15°	501	493	471	462	458	139
25°	376	360	344	338	331	173
35°	250	231	210	208	203	156
45°	130	117	103	86	75	100
55°	22	31	29	30	33	28
65°	7	8	9	12	15	7
75°	2	3	3	4	6	3
85°	0	0	0	1	1	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	562.4	562.4	562.4	562.4	562.4
2.5°	561.2	562.4	556.7	562.4	564.6
5°	556.7	557.9	548.9	551.1	551.1
7.5°	550.0	548.9	536.5	534.3	533.2
10°	538.8	535.4	517.5	514.1	510.7
12.5°	521.9	515.2	496.1	490.5	486.0
15°	500.6	492.8	471.4	462.5	458.0
17.5°	471.4	462.5	442.3	433.3	428.8
20°	437.8	428.8	413.1	403.0	398.5
22.5°	409.7	395.1	378.3	371.5	365.9
25°	376.0	360.3	343.5	337.9	331.1
27.5°	344.6	325.5	308.7	304.2	298.6
30°	314.3	294.1	273.9	273.9	266.0
32.5°	281.7	262.7	241.3	240.2	235.7
35°	250.3	231.2	209.9	207.7	203.2
37.5°	221.1	202.0	181.8	175.1	169.5
40°	188.6	171.7	154.9	143.7	136.9
42.5°	162.8	143.7	126.8	113.4	104.4
45°	130.2	116.7	103.3	86.4	75.2
47.5°	101.0	92.0	80.8	61.7	56.1
50°	74.1	69.6	60.6	46.0	44.9
52.5°	47.1	49.4	43.8	35.9	39.3
55°	22.4	31.4	29.2	30.3	32.6
57.5°	14.6	15.7	21.3	24.7	26.9
60°	11.2	11.2	15.7	20.2	22.4
62.5°	9.0	9.0	12.3	16.8	18.0
65°	6.7	7.9	9.0	12.3	14.6
67.5°	5.6	5.6	6.7	10.1	11.2
70°	4.5	4.5	5.6	7.9	9.0
72.5°	3.4	3.4	4.5	6.7	6.7
75°	2.2	3.4	3.4	4.5	5.6
77.5°	2.2	2.2	2.2	3.4	4.5
80°	1.1	1.1	2.2	2.2	3.4
82.5°	1.1	1.1	1.1	1.1	2.2
85°	0.0	0.0	0.0	1.1	1.1
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)