

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: P1058137

Luminaire Tested: S122RDR-S865D840-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058137
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S865D840-X4F0-XX-UDD-WVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

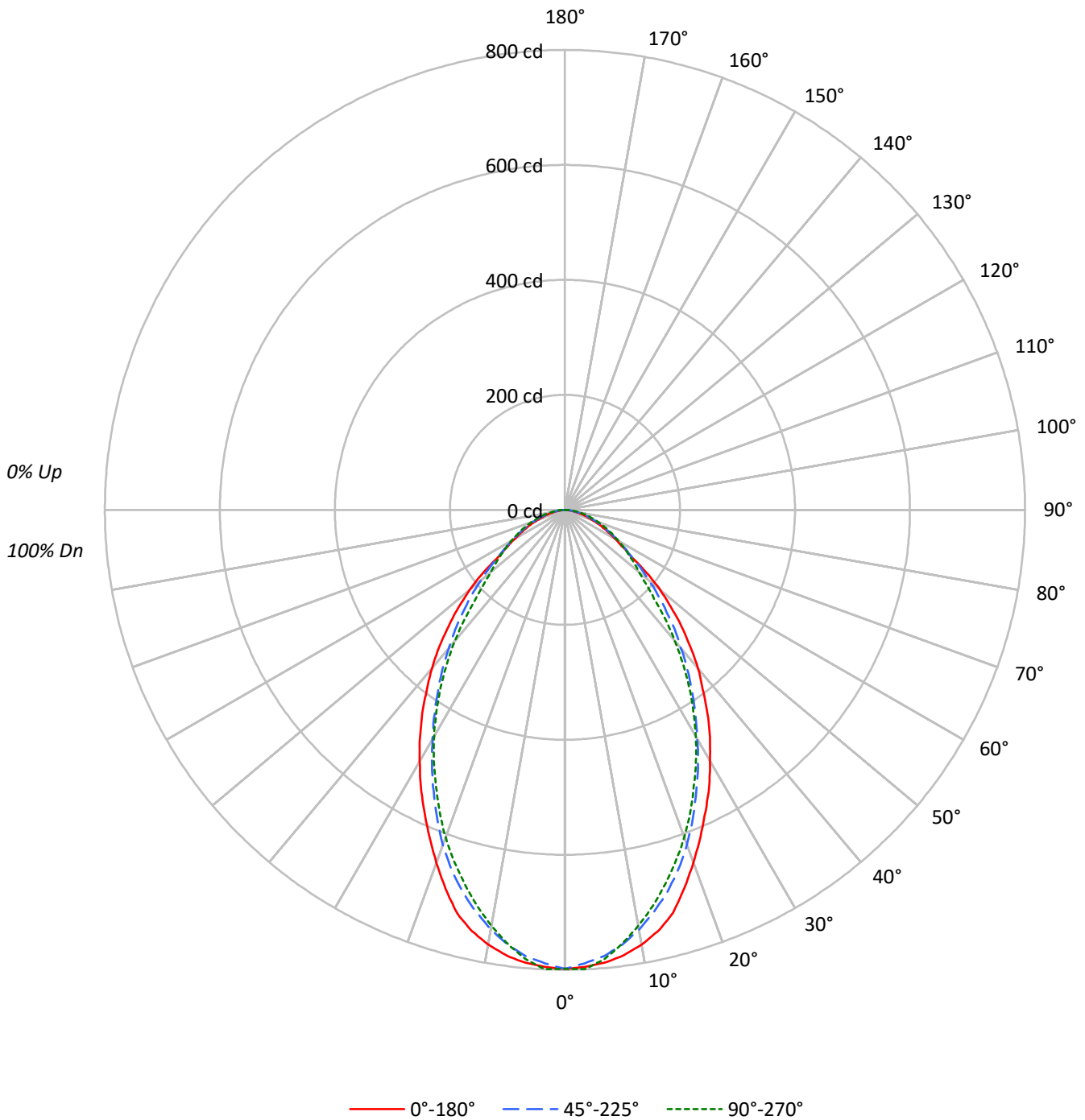
Lumens per Lamp: N/A
Luminaire Lumens: 1212.5 lumens
Efficiency: N/A
Efficacy: 34.6 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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				100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77				77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61				61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54				54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49				49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44				44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41				41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37				37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34				34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14732	14732	14732
5°	14646	14435	14529
10°	14388	13888	13768
15°	13867	13139	12872
20°	12831	12183	11908
25°	11776	11001	10793
30°	10754	9806	9697
35°	9736	8677	8477
40°	8667	7564	7166
45°	7463	6503	5738
50°	6166	5474	4817
55°	4459	4539	4337
60°	3705	3893	3941
65°	3166	3384	3607
70°	2606	3016	3291
75°	2174	2538	2994
80°	1626	2030	2699
85°	529	1080	2414

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7463 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.8	6.1
10°-20°	194.3	16.0
20°-30°	251.5	20.7
30°-40°	246.7	20.3
40°-50°	194.2	16.0
50°-60°	127.3	10.5
60°-70°	77.5	6.4
70°-80°	38.8	3.2
80°-90°	8.3	0.7
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°	519.7	42.9
0°-40°	766.3	63.2
0°-60°	1087.9	89.7
0°-90°	1212.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1212.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	798	798	798	798	798	
5°	791	791	779	784	784	75
15°	726	716	688	679	674	202
25°	578	559	540	538	530	266
35°	432	408	385	384	376	270
45°	286	268	249	231	220	220
55°	139	146	141	136	135	132
65°	72	74	78	81	83	72
75°	30	32	36	41	42	32
85°	2	4	5	9	11	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	798.4	798.4	798.4	798.4	798.4
2.5°	795.8	797.1	789.5	797.1	799.6
5°	790.7	790.7	779.3	784.4	784.4
7.5°	781.9	780.6	762.8	762.8	761.5
10°	767.9	762.8	741.2	737.4	734.8
12.5°	750.1	741.2	715.7	709.4	705.6
15°	725.9	715.7	687.8	678.9	673.8
17.5°	690.3	680.1	656.0	645.8	640.7
20°	653.4	638.2	620.4	611.5	606.4
22.5°	615.3	597.5	581.0	574.6	569.5
25°	578.4	559.4	540.3	537.8	530.1
27.5°	542.8	520.0	500.9	499.6	493.3
30°	504.7	480.6	460.2	461.5	455.1
32.5°	469.1	446.2	422.1	423.3	415.7
35°	432.2	408.1	385.2	383.9	376.3
37.5°	394.1	371.2	349.6	344.5	336.9
40°	359.8	336.9	314.0	305.1	297.5
42.5°	322.9	302.6	282.2	268.2	258.1
45°	286.0	268.2	249.2	231.4	219.9
47.5°	250.4	236.5	219.9	198.3	190.7
50°	214.8	204.7	190.7	171.6	167.8
52.5°	178.0	174.2	165.3	152.6	151.3
55°	138.6	146.2	141.1	136.0	134.8
57.5°	117.0	118.2	122.0	120.8	120.8
60°	100.4	100.4	105.5	106.8	106.8
62.5°	85.2	86.4	91.5	94.1	94.1
65°	72.5	73.7	77.5	81.4	82.6
67.5°	59.8	62.3	66.1	69.9	71.2
70°	48.3	50.9	55.9	59.8	61.0
72.5°	39.4	40.7	45.8	49.6	50.9
75°	30.5	31.8	35.6	40.7	42.0
77.5°	21.6	24.2	28.0	31.8	34.3
80°	15.3	16.5	19.1	24.2	25.4
82.5°	8.9	10.2	12.7	16.5	17.8
85°	2.5	3.8	5.1	8.9	11.4
87.5°	0.0	0.0	0.0	2.5	5.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)