

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: P1057960

Luminaire Tested: S122RDR-S485D835-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057960
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S485D835-X4F0-XX-UDD-BVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

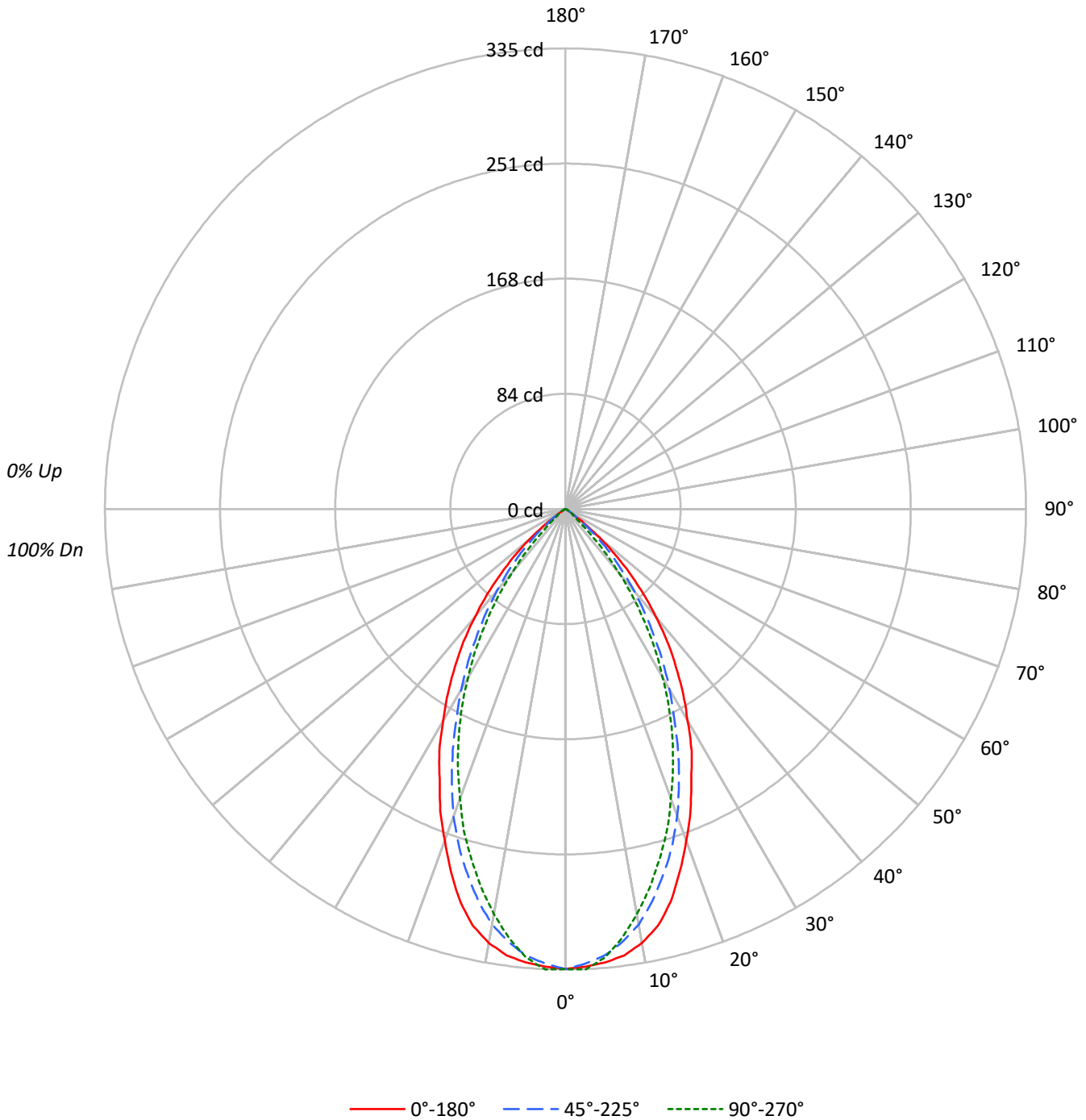
Lumens per Lamp: N/A
Luminaire Lumens: 314.6 lumens
Efficiency: N/A
Efficacy: 16.1 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93	93	93
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86	86	86
3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79	79	79
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73	73	73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67	67	67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62	62	62
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58	58	58
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54	54	54
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52	51	51	51
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47	47	47

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6174	6174	6174
5°	6133	6040	6066
10°	6005	5752	5606
15°	5649	5257	5041
20°	5043	4668	4403
25°	4408	3946	3744
30°	3784	3226	3015
35°	3156	2518	2264
40°	2455	1857	1448
45°	1717	1237	629
50°	933	649	224
55°	135	228	161
60°	26	52	103
65°	0	31	61
70°	0	0	38
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1717 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.7	9.8
10°-20°	77.5	24.6
20°-30°	90.3	28.7
30°-40°	72.4	23.0
40°-50°	36.0	11.4
50°-60°	7.1	2.3
60°-70°	0.6	0.2
70°-80°	0.1	0.0
80°-90°	0.0	0.0
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°	198.5	63.1
0°-40°	270.9	86.1
0°-60°	314.0	99.8
0°-90°	314.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	314.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	335	335	335	335	335	
5°	331	331	326	327	328	31
15°	296	290	275	268	264	82
25°	216	206	194	190	184	100
35°	140	126	112	107	100	87
45°	66	58	47	32	24	51
55°	4	8	7	4	5	9
65°	0	0	1	1	1	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	334.6	334.6	334.6	334.6	334.6
2.5°	333.2	334.6	331.1	334.6	335.3
5°	331.1	331.1	326.1	326.8	327.5
7.5°	327.5	326.1	317.6	316.2	314.8
10°	320.5	317.6	307.0	301.4	299.2
12.5°	310.6	306.3	292.2	285.8	282.3
15°	295.7	290.0	275.2	268.1	263.9
17.5°	276.6	271.6	257.5	249.7	245.5
20°	256.8	249.7	237.7	229.9	224.2
22.5°	237.7	228.5	215.8	210.1	204.4
25°	216.5	205.9	193.8	189.6	183.9
27.5°	198.8	185.3	171.2	168.4	163.4
30°	177.6	164.8	151.4	147.1	141.5
32.5°	159.2	145.0	131.6	126.6	121.7
35°	140.1	125.9	111.8	106.8	100.5
37.5°	121.7	108.2	94.1	86.3	80.6
40°	101.9	90.5	77.1	67.2	60.1
42.5°	84.2	74.3	61.5	48.8	41.7
45°	65.8	58.0	47.4	31.8	24.1
47.5°	48.8	43.2	34.7	18.4	12.7
50°	32.5	30.4	22.6	9.2	7.8
52.5°	17.7	19.1	13.4	5.7	6.4
55°	4.2	8.5	7.1	4.2	5.0
57.5°	0.7	1.4	3.5	3.5	3.5
60°	0.7	0.7	1.4	2.1	2.8
62.5°	0.7	0.0	0.7	1.4	2.1
65°	0.0	0.0	0.7	0.7	1.4
67.5°	0.0	0.0	0.0	0.7	0.7
70°	0.0	0.0	0.0	0.7	0.7
72.5°	0.0	0.0	0.0	0.0	0.7
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
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)