

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: P1059021

Luminaire Tested: S123RDR-S1000D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059021
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1000D835-X4F0-XX-UDD-WVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

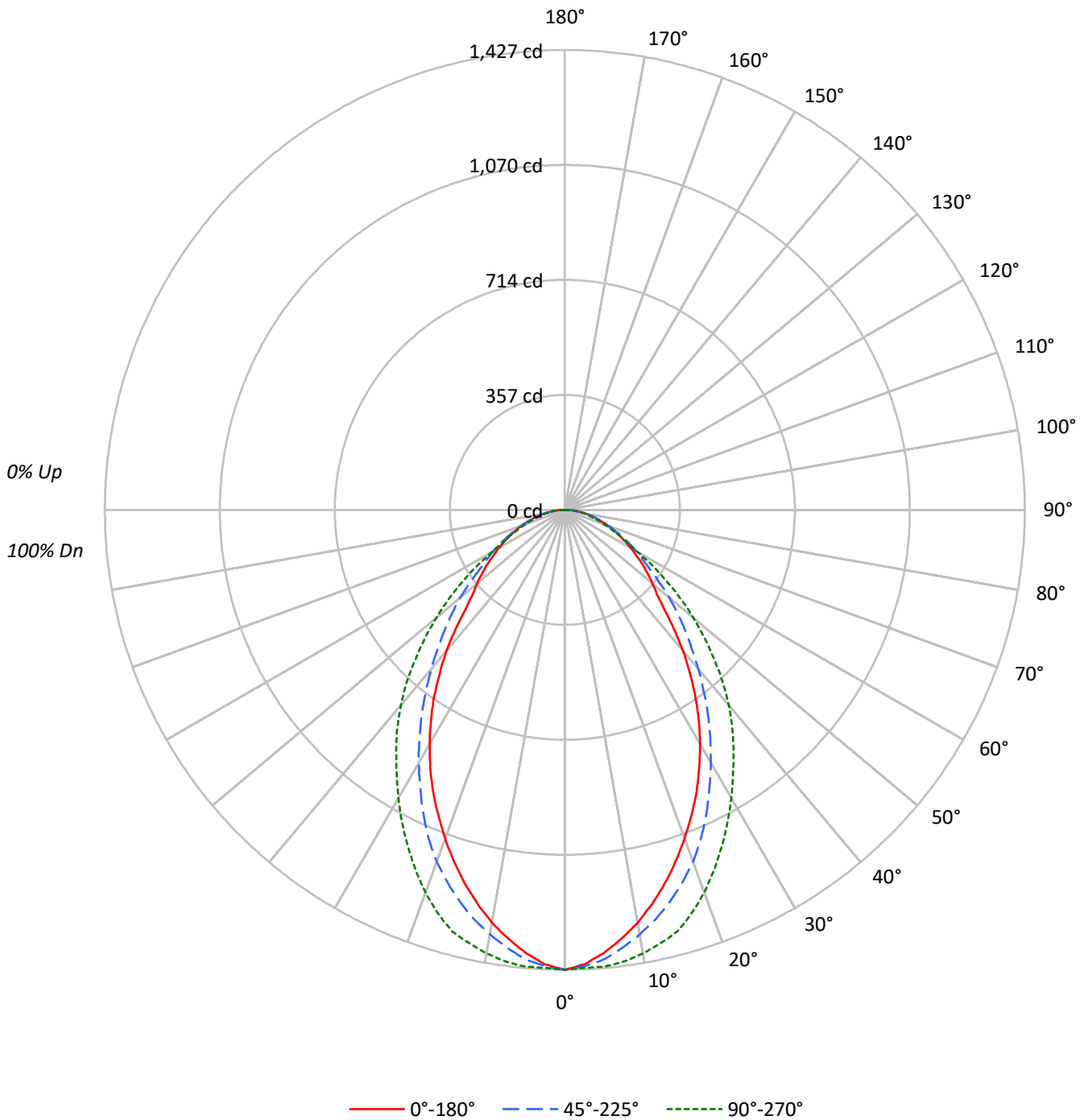
Lumens per Lamp: N/A
Luminaire Lumens: 2507.7 lumens
Efficiency: N/A
Efficacy: 71.6 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87				87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				75
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66				66
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58				58
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51				51
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46				46
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41				41
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38				38
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34				34
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32				32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16758	16758	16758
5°	16271	16503	16764
10°	15508	15948	16664
15°	14587	15304	16453
20°	13567	14518	15792
25°	12524	13462	14926
30°	11373	12290	14005
35°	10123	11091	13081
40°	8736	9884	12123
45°	7220	8750	10870
50°	6483	7718	9490
55°	6009	6588	7870
60°	5538	6000	6029
65°	5154	5426	5051
70°	4848	4934	4429
75°	4569	4401	3902
80°	4321	3990	3652
85°	4136	4473	4136

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10870 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.2	5.3
10°-20°	356.1	14.2
20°-30°	481.7	19.2
30°-40°	495.0	19.7
40°-50°	415.8	16.6
50°-60°	298.1	11.9
60°-70°	189.8	7.6
70°-80°	104.3	4.2
80°-90°	34.8	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°	970.0	38.7
0°-40°	1465.1	58.4
0°-60°	2178.9	86.9
0°-90°	2507.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2507.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1427	1427	1427	1427	1427	
5°	1380	1405	1400	1410	1422	129
15°	1200	1233	1259	1313	1353	336
25°	967	1003	1039	1096	1152	443
35°	706	744	774	842	912	439
45°	435	473	527	603	655	343
55°	294	300	322	365	384	262
65°	186	196	195	184	182	185
75°	101	110	97	90	86	107
85°	31	32	33	34	31	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1427.1	1427.1	1427.1	1427.1	1427.1
2.5°	1411.1	1430.8	1417.3	1418.5	1422.2
5°	1380.4	1405.0	1400.1	1409.9	1422.2
7.5°	1342.4	1369.4	1370.6	1394.0	1413.6
10°	1300.6	1328.9	1337.5	1373.1	1397.6
12.5°	1251.5	1282.2	1300.6	1344.8	1376.8
15°	1199.9	1233.1	1258.9	1312.9	1353.4
17.5°	1143.4	1179.0	1212.2	1269.9	1311.7
20°	1085.7	1123.8	1161.8	1215.9	1263.8
22.5°	1025.5	1064.8	1104.1	1156.9	1209.7
25°	966.6	1003.4	1039.0	1095.5	1152.0
27.5°	902.7	940.8	971.5	1034.1	1093.1
30°	838.8	876.9	906.4	971.5	1032.9
32.5°	772.5	811.8	838.8	906.4	970.2
35°	706.2	744.3	773.7	842.5	912.5
37.5°	636.2	677.9	707.4	784.8	853.6
40°	569.9	609.2	644.8	725.8	790.9
42.5°	501.1	541.6	582.1	665.7	725.8
45°	434.8	472.8	526.9	603.0	654.6
47.5°	386.9	411.4	474.1	537.9	587.1
50°	354.9	364.8	422.5	479.0	519.5
52.5°	323.0	330.4	369.7	421.3	452.0
55°	293.5	299.7	321.8	364.8	384.4
57.5°	261.6	267.7	286.2	310.7	321.8
60°	235.8	240.7	255.5	259.1	256.7
62.5°	210.0	217.4	224.8	216.2	212.5
65°	185.5	196.5	195.3	184.2	181.8
67.5°	163.3	174.4	168.3	157.2	153.5
70°	141.2	152.3	143.7	132.6	129.0
72.5°	120.4	132.6	119.1	109.3	106.8
75°	100.7	110.5	97.0	89.7	86.0
77.5°	82.3	89.7	77.4	71.2	68.8
80°	63.9	68.8	59.0	55.3	54.0
82.5°	46.7	49.1	43.0	45.4	44.2
85°	30.7	31.9	33.2	34.4	30.7
87.5°	14.7	20.9	20.9	19.7	16.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)