

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: P1001100

Luminaire Tested: S124RDR-B795DB27-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001100
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-B795DB27-4F0-XX-W2A-F
Description: Define 4 Regressed Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

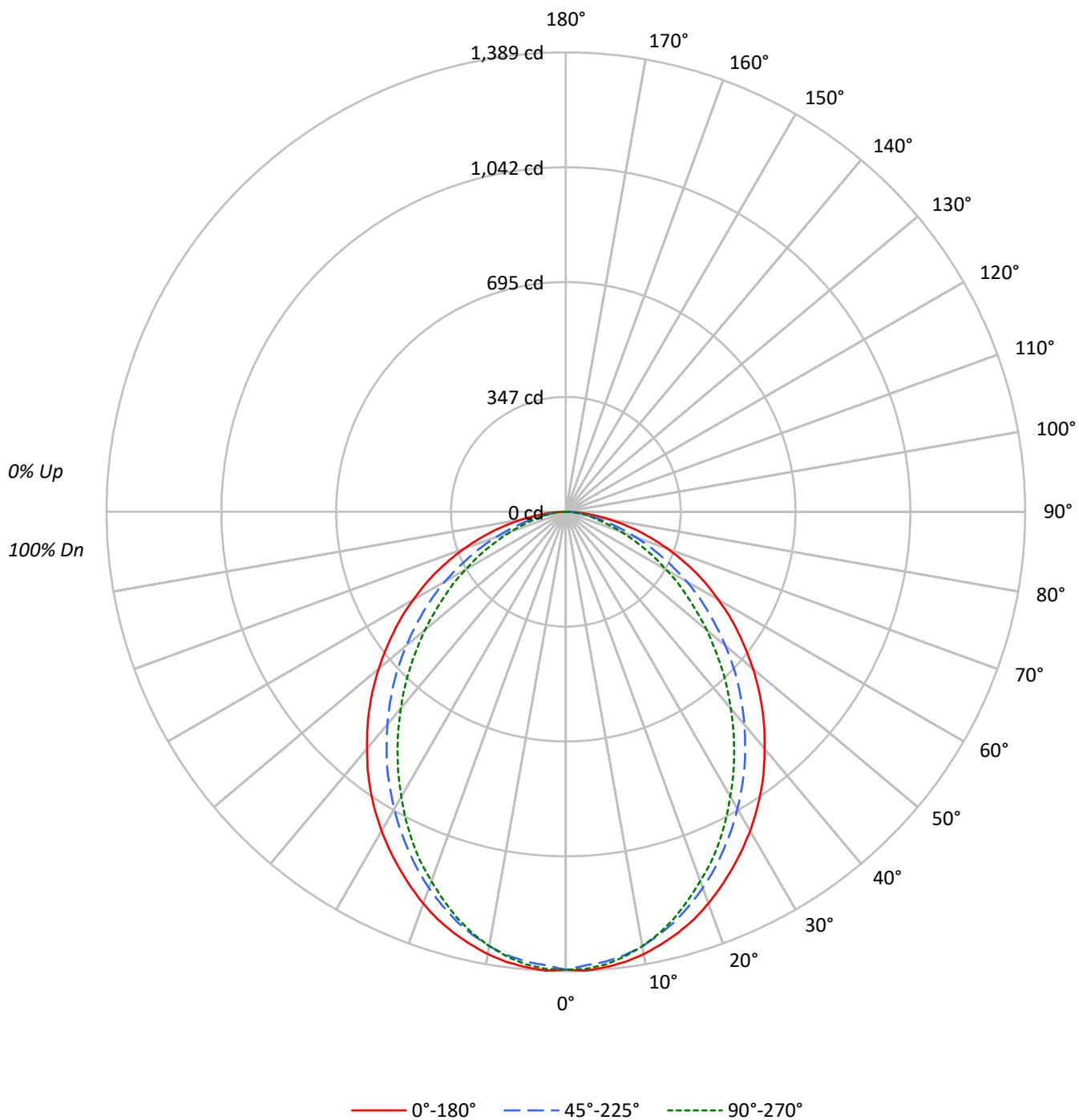
Lumens per Lamp: N/A
Luminaire Lumens: 3199.0 lumens
Efficiency: N/A
Efficacy: 89.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35.9
Input Voltage (V):
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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	105	101	98	107	103	99	96	99	96	93		95	92	90		91
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81
3	92	82	74	68	89	80	73	67	77	71	66		75	69	65		72
4	84	73	65	58	82	72	64	58	69	62	57		67	61	56		65
5	78	66	57	51	76	65	56	50	62	55	50		61	54	49		59
6	72	59	51	45	70	58	50	44	57	49	44		55	49	44		53
7	67	54	46	40	65	53	45	40	52	45	39		50	44	39		49
8	63	50	41	36	61	49	41	36	48	40	35		46	40	35		45
9	59	46	38	32	57	45	37	32	44	37	32		43	36	32		42
10	55	42	35	29	54	42	34	29	41	34	29		40	33	29		39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11290	11290	11290
5°	11316	11177	11246
10°	11245	11043	11043
15°	11115	10811	10731
20°	10938	10505	10313
25°	10711	10148	9891
30°	10491	9772	9363
35°	10247	9381	8833
40°	9953	8937	8260
45°	9682	8497	7677
50°	9374	7988	7061
55°	9043	7460	6390
60°	8680	6881	5705
65°	8345	6157	5032
70°	7861	5357	4273
75°	7246	4442	3472
80°	6321	3386	3184
85°	5352	3078	2872

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9682 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	4.1
10°-20°	363.0	11.3
20°-30°	524.1	16.4
30°-40°	593.9	18.6
40°-50°	573.5	17.9
50°-60°	476.8	14.9
60°-70°	329.1	10.3
70°-80°	166.3	5.2
80°-90°	42.2	1.3
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°	1017.2	31.8
0°-40°	1611.2	50.4
0°-60°	2661.4	83.2
0°-90°	3199.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3199.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1384	1384	1384	1384	1384	
5°	1382	1378	1365	1376	1374	131
15°	1317	1307	1281	1278	1271	371
25°	1190	1171	1128	1110	1099	549
35°	1029	995	942	906	887	643
45°	840	800	737	685	666	647
55°	636	594	525	470	450	569
65°	432	387	319	274	261	427
75°	230	191	141	117	110	243
85°	57	36	33	31	31	66
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1384.5	1384.5	1384.5	1384.5	1384.5
2.5°	1388.7	1384.5	1372.8	1384.5	1383.4
5°	1382.4	1378.1	1365.4	1376.0	1373.9
7.5°	1372.8	1368.6	1352.7	1360.1	1356.9
10°	1358.0	1352.7	1333.6	1337.8	1333.6
12.5°	1338.9	1332.5	1309.2	1311.3	1305.0
15°	1316.6	1307.1	1280.6	1278.5	1271.1
17.5°	1291.2	1277.4	1246.7	1241.4	1230.8
20°	1260.5	1246.7	1210.6	1202.1	1188.4
22.5°	1226.5	1210.6	1171.4	1157.6	1147.0
25°	1190.5	1171.4	1127.9	1109.9	1099.3
27.5°	1153.4	1130.1	1084.5	1063.3	1048.4
30°	1114.2	1087.7	1037.8	1011.3	994.4
32.5°	1072.8	1042.1	990.1	958.3	942.4
35°	1029.4	995.4	942.4	906.4	887.3
37.5°	983.8	948.8	890.5	851.3	832.2
40°	935.0	900.0	839.6	795.1	776.0
42.5°	888.4	851.3	787.7	742.1	721.9
45°	839.6	800.4	736.8	684.8	665.7
47.5°	789.8	749.5	683.8	629.7	608.5
50°	738.9	697.5	629.7	576.7	556.6
52.5°	686.9	646.7	576.7	522.6	501.4
55°	636.1	593.7	524.7	469.6	449.5
57.5°	586.2	541.7	473.9	417.7	402.8
60°	532.2	489.8	421.9	366.8	349.8
62.5°	483.4	438.9	368.9	319.1	306.4
65°	432.5	386.9	319.1	273.5	260.8
67.5°	379.5	336.1	272.4	232.2	217.3
70°	329.7	285.2	224.7	189.8	179.2
72.5°	276.7	237.5	181.3	152.7	143.1
75°	230.0	190.8	141.0	116.6	110.2
77.5°	181.3	147.4	104.9	88.0	85.9
80°	134.6	103.9	72.1	68.9	67.8
82.5°	94.3	66.8	51.9	49.8	48.8
85°	57.2	36.0	32.9	30.7	30.7
87.5°	24.4	15.9	14.8	13.8	14.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)