

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: P1001110

Luminaire Tested: S124RDR-B795DB2750-4F0-XX-W2A-F_5000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001110
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-B795DB2750-4F0-XX-W2A-F_5000K
Description: Define 4 Regressed Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

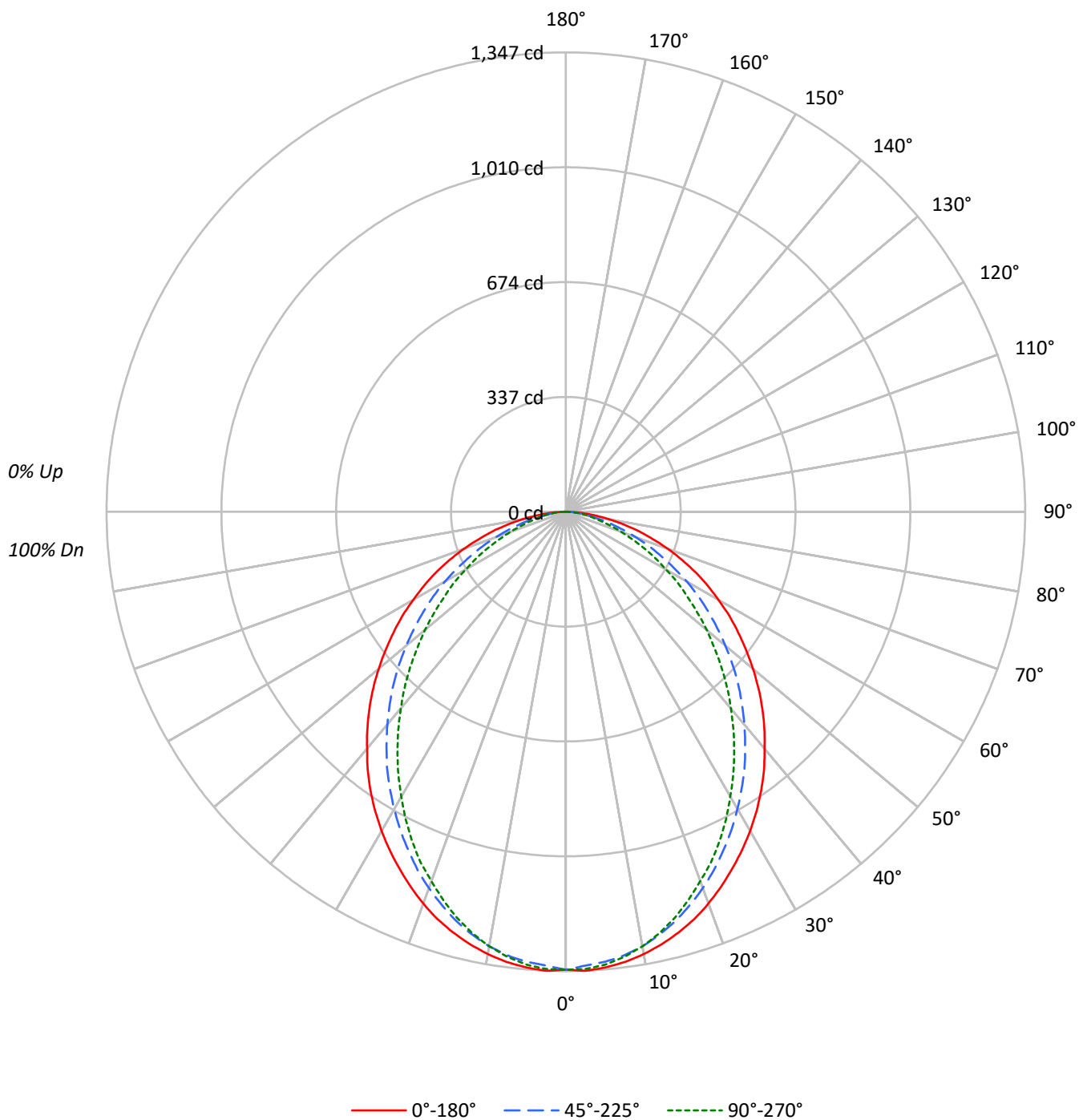
Lumens per Lamp: N/A
Luminaire Lumens: 3103.0 lumens
Efficiency: N/A
Efficacy: 86.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1001110

CATALOG NUMBER: S124RDR-B795DB2750-4F0-XX-W2A-F_5000K

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	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		
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85		
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	74	72		
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62		
4	84	73	65	58	82	72	64	58	69	62	57	67	61	56	65	60	56	54		
5	78	66	57	51	76	65	56	50	62	55	50	61	54	49	59	53	49	47		
6	72	59	51	45	70	58	50	44	57	49	44	55	49	44	53	48	43	41		
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	37		
8	63	50	41	36	61	49	41	36	48	40	35	46	40	35	45	39	35	33		
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30		
10	55	42	35	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10951	10951	10951
5°	10976	10841	10909
10°	10907	10711	10711
15°	10781	10487	10408
20°	10609	10190	10003
25°	10390	9844	9594
30°	10176	9479	9082
35°	9940	9100	8568
40°	9654	8669	8012
45°	9392	8242	7447
50°	9092	7749	6848
55°	8772	7236	6199
60°	8419	6675	5534
65°	8094	5972	4882
70°	7625	5198	4144
75°	7029	4310	3368
80°	6133	3282	3090
85°	5193	2985	2788

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9392 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.3	4.1
10°-20°	352.1	11.3
20°-30°	508.3	16.4
30°-40°	576.1	18.6
40°-50°	556.3	17.9
50°-60°	462.5	14.9
60°-70°	319.2	10.3
70°-80°	161.3	5.2
80°-90°	41.0	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°	986.7	31.8
0°-40°	1562.8	50.4
0°-60°	2581.6	83.2
0°-90°	3103.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3103.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1343	1343	1343	1343	1343	
5°	1341	1337	1324	1335	1333	127
15°	1277	1268	1242	1240	1233	360
25°	1155	1136	1094	1077	1066	532
35°	998	966	914	879	861	624
45°	814	776	715	664	646	628
55°	617	576	509	456	436	552
65°	420	375	310	265	253	414
75°	223	185	137	113	107	235
85°	56	35	32	30	30	64
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1342.9	1342.9	1342.9	1342.9	1342.9
2.5°	1347.1	1342.9	1331.6	1342.9	1341.9
5°	1340.9	1336.8	1324.4	1334.7	1332.7
7.5°	1331.6	1327.5	1312.1	1319.3	1316.2
10°	1317.2	1312.1	1293.6	1297.7	1293.6
12.5°	1298.7	1292.6	1269.9	1272.0	1265.8
15°	1277.1	1267.9	1242.2	1240.1	1232.9
17.5°	1252.4	1239.1	1209.3	1204.1	1193.8
20°	1222.6	1209.3	1174.3	1166.1	1152.7
22.5°	1189.7	1174.3	1136.3	1122.9	1112.6
25°	1154.8	1136.3	1094.1	1076.6	1066.3
27.5°	1118.8	1096.1	1051.9	1031.4	1017.0
30°	1080.7	1055.0	1006.7	981.0	964.5
32.5°	1040.6	1010.8	960.4	929.6	914.1
35°	998.5	965.6	914.1	879.2	860.7
37.5°	954.2	920.3	863.8	825.7	807.2
40°	906.9	873.0	814.4	771.2	752.7
42.5°	861.7	825.7	764.0	719.8	700.3
45°	814.4	776.4	714.7	664.3	645.8
47.5°	766.1	727.0	663.2	610.8	590.2
50°	716.7	676.6	610.8	559.4	539.8
52.5°	666.3	627.3	559.4	506.9	486.4
55°	617.0	575.8	509.0	455.5	436.0
57.5°	568.6	525.5	459.6	405.1	390.7
60°	516.2	475.1	409.3	355.8	339.3
62.5°	468.9	425.7	357.8	309.5	297.2
65°	419.5	375.3	309.5	265.3	253.0
67.5°	368.1	326.0	264.3	225.2	210.8
70°	319.8	276.6	218.0	184.1	173.8
72.5°	268.4	230.3	175.8	148.1	138.8
75°	223.1	185.1	136.8	113.1	106.9
77.5°	175.8	142.9	101.8	85.3	83.3
80°	130.6	100.8	69.9	66.8	65.8
82.5°	91.5	64.8	50.4	48.3	47.3
85°	55.5	35.0	31.9	29.8	29.8
87.5°	23.7	15.4	14.4	13.4	14.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)