

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: P1001112

Luminaire Tested: S124RDR-B795DB30-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001112
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-B795DB30-4F0-XX-W2A-F
Description: Define 4 Regressed Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

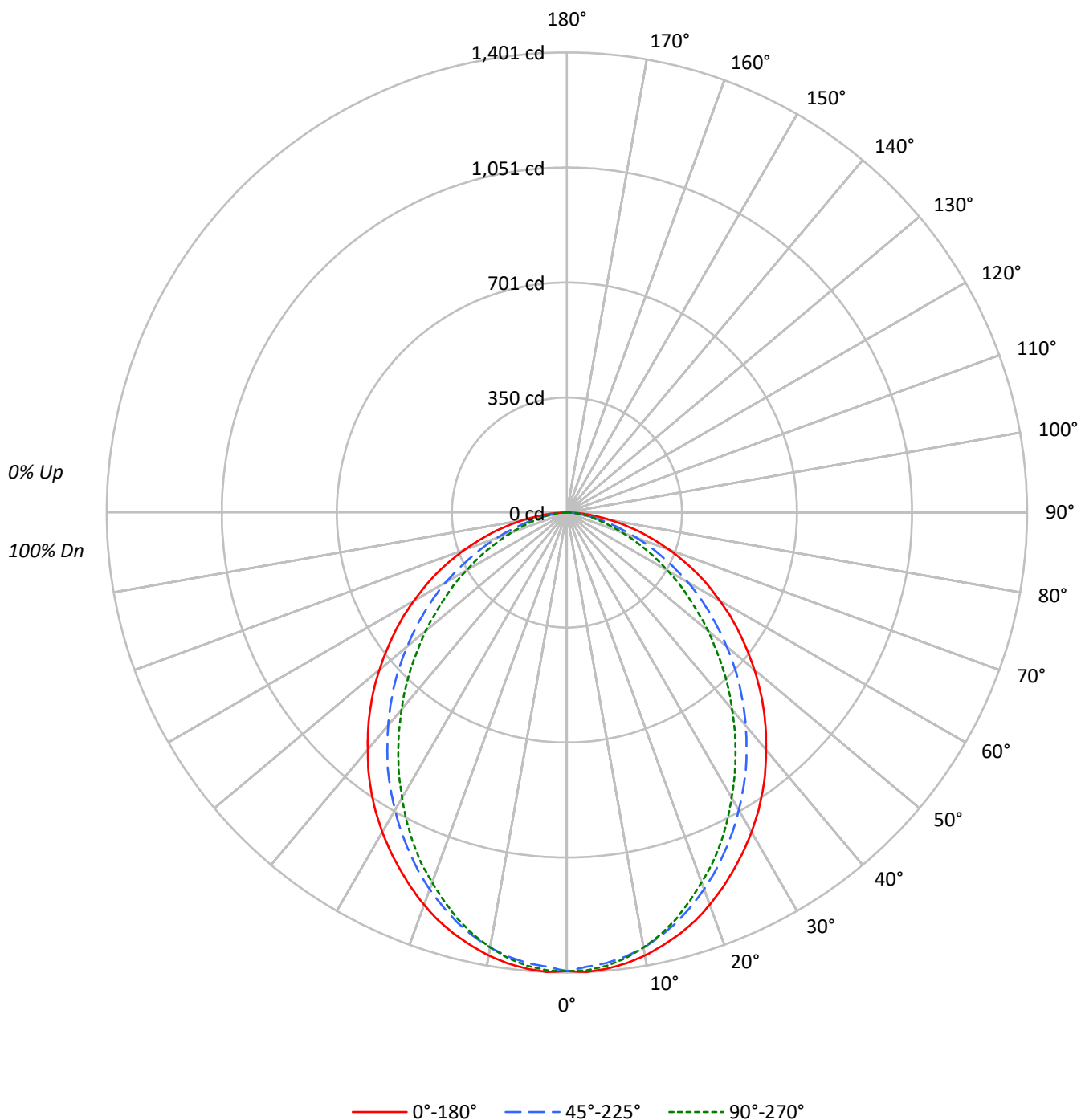
Lumens per Lamp: N/A
Luminaire Lumens: 3227.0 lumens
Efficiency: N/A
Efficacy: 89.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

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°	11389	11389	11389
5°	11415	11275	11344
10°	11343	11139	11139
15°	11213	10906	10825
20°	11034	10597	10403
25°	10805	10237	9977
30°	10583	9858	9445
35°	10337	9464	8911
40°	10040	9015	8333
45°	9767	8571	7745
50°	9456	8058	7122
55°	9122	7525	6446
60°	8755	6941	5755
65°	8418	6211	5077
70°	7930	5405	4308
75°	7313	4480	3504
80°	6377	3414	3212
85°	5399	3106	2900

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9767 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.3	4.1
10°-20°	366.2	11.3
20°-30°	528.7	16.4
30°-40°	599.1	18.6
40°-50°	578.5	17.9
50°-60°	480.9	14.9
60°-70°	331.9	10.3
70°-80°	167.7	5.2
80°-90°	42.6	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°	1026.2	31.8
0°-40°	1625.3	50.4
0°-60°	2684.7	83.2
0°-90°	3227.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3227.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1397	1397	1397	1397	1397	
5°	1394	1390	1377	1388	1386	132
15°	1328	1318	1292	1290	1282	374
25°	1201	1182	1138	1120	1109	553
35°	1038	1004	951	914	895	649
45°	847	807	743	691	672	653
55°	642	599	529	474	453	574
65°	436	390	322	276	263	431
75°	232	192	142	118	111	245
85°	58	36	33	31	31	67
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1396.6	1396.6	1396.6	1396.6	1396.6
2.5°	1400.9	1396.6	1384.8	1396.6	1395.5
5°	1394.5	1390.2	1377.4	1388.0	1385.9
7.5°	1384.8	1380.6	1364.5	1372.0	1368.8
10°	1369.9	1364.5	1345.3	1349.6	1345.3
12.5°	1350.6	1344.2	1320.7	1322.8	1316.4
15°	1328.2	1318.5	1291.8	1289.7	1282.2
17.5°	1302.5	1288.6	1257.6	1252.2	1241.5
20°	1271.5	1257.6	1221.2	1212.7	1198.8
22.5°	1237.3	1221.2	1181.7	1167.8	1157.1
25°	1200.9	1181.7	1137.8	1119.6	1108.9
27.5°	1163.5	1140.0	1094.0	1072.6	1057.6
30°	1123.9	1097.2	1046.9	1020.2	1003.1
32.5°	1082.2	1051.2	998.8	966.7	950.7
35°	1038.4	1004.1	950.7	914.3	895.1
37.5°	992.4	957.1	898.3	858.7	839.5
40°	943.2	907.9	846.9	802.0	782.8
42.5°	896.1	858.7	794.5	748.6	728.2
45°	846.9	807.4	743.2	690.8	671.6
47.5°	796.7	756.0	689.7	635.2	613.8
50°	745.4	703.6	635.2	581.7	561.4
52.5°	693.0	652.3	581.7	527.2	505.8
55°	641.6	598.8	529.3	473.7	453.4
57.5°	591.4	546.5	478.0	421.3	406.4
60°	536.8	494.1	425.6	370.0	352.9
62.5°	487.6	442.7	372.1	321.9	309.0
65°	436.3	390.3	321.9	275.9	263.1
67.5°	382.8	339.0	274.8	234.2	219.2
70°	332.6	287.7	226.7	191.4	180.7
72.5°	279.1	239.5	182.9	154.0	144.4
75°	232.1	192.5	142.2	117.6	111.2
77.5°	182.9	148.6	105.9	88.8	86.6
80°	135.8	104.8	72.7	69.5	68.4
82.5°	95.2	67.4	52.4	50.3	49.2
85°	57.7	36.4	33.2	31.0	31.0
87.5°	24.6	16.0	15.0	13.9	15.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)