

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: P998728

Luminaire Tested: S124R3DR-B1020DB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P998728
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: S124R3DR-B1020DB2750-4F0-XX-W2A-F_3500K
Description: Define 4 3in Regressed Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792
Light Source: -
Ballast/Driver: -

Summary

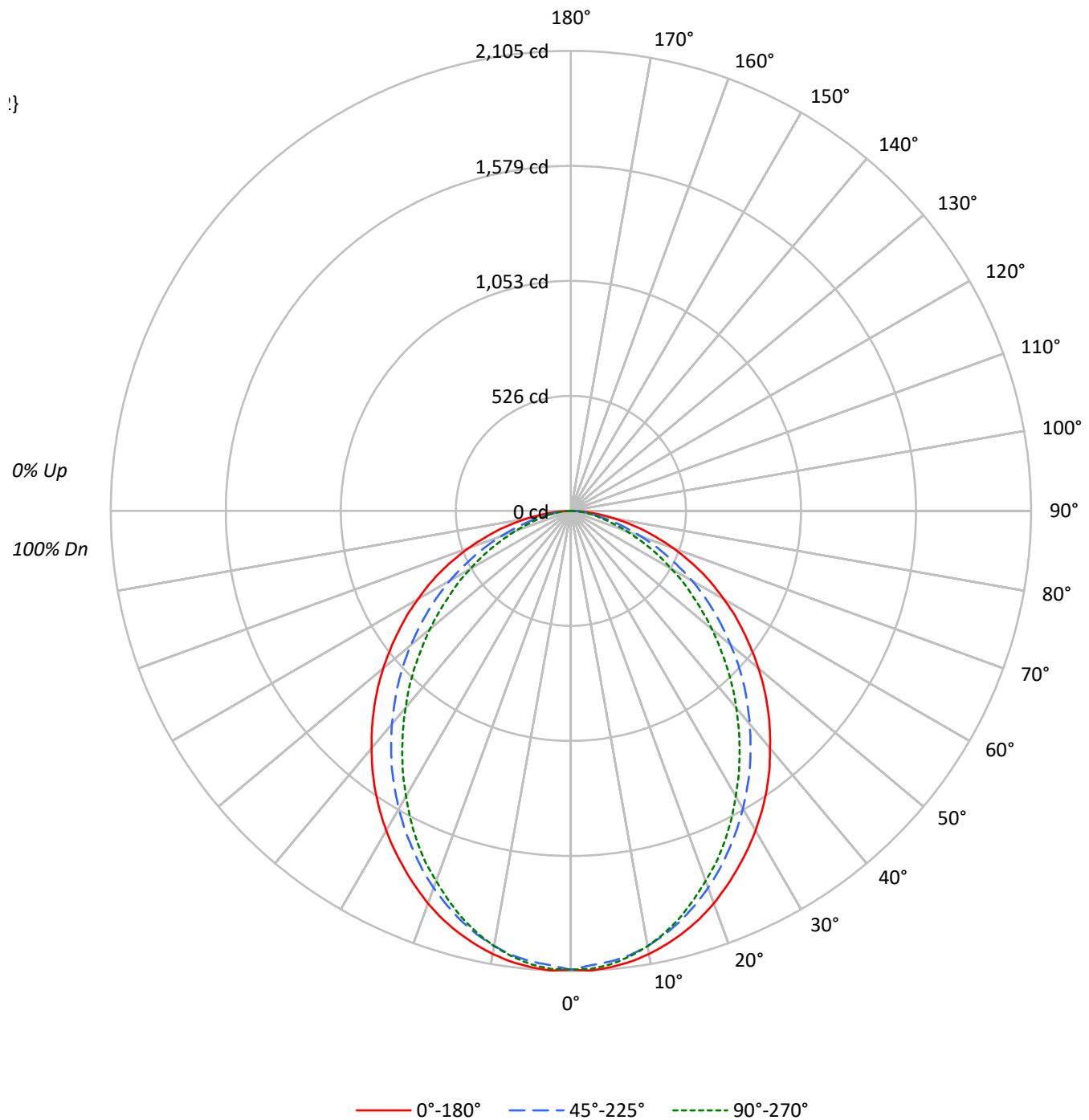
Lumens per Lamp: N/A
Luminaire Lumens: 4850.0 lumens
Efficiency: N/A
Efficacy: 79.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 61.3
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				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		0
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°	17116	17116	17116
5°	17155	16945	17050
10°	17047	16742	16742
15°	16852	16390	16268
20°	16583	15927	15635
25°	16240	15387	14996
30°	15905	14816	14196
35°	15535	14223	13391
40°	15090	13550	12524
45°	14679	12881	11639
50°	14211	12111	10705
55°	13709	11311	9689
60°	13158	10433	8650
65°	12652	9335	7629
70°	11916	8123	6476
75°	10989	6736	5265
80°	9584	5133	4832
85°	8121	4659	4360

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14679 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.4	4.1
10°-20°	550.3	11.3
20°-30°	794.5	16.4
30°-40°	900.5	18.6
40°-50°	869.4	17.9
50°-60°	722.8	14.9
60°-70°	498.9	10.3
70°-80°	252.1	5.2
80°-90°	64.0	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°	1542.2	31.8
0°-40°	2442.7	50.4
0°-60°	4035.0	83.2
0°-90°	4850.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4850.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2099	2099	2099	2099	2099	
5°	2096	2089	2070	2086	2083	199
15°	1996	1982	1942	1938	1927	563
25°	1805	1776	1710	1683	1667	832
35°	1561	1509	1429	1374	1345	975
45°	1273	1213	1117	1038	1009	982
55°	964	900	796	712	682	863
65°	656	587	484	415	395	648
75°	349	289	214	177	167	368
85°	87	55	50	47	47	100
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2099.0	2099.0	2099.0	2099.0	2099.0
2.5°	2105.4	2099.0	2081.3	2099.0	2097.4
5°	2095.8	2089.4	2070.1	2086.2	2082.9
7.5°	2081.3	2074.9	2050.8	2062.1	2057.2
10°	2058.8	2050.8	2021.9	2028.3	2021.9
12.5°	2029.9	2020.3	1984.9	1988.1	1978.5
15°	1996.2	1981.7	1941.5	1938.3	1927.0
17.5°	1957.6	1936.7	1890.1	1882.0	1866.0
20°	1911.0	1890.1	1835.4	1822.6	1801.7
22.5°	1859.5	1835.4	1776.0	1755.1	1739.0
25°	1804.9	1776.0	1710.1	1682.7	1666.7
27.5°	1748.6	1713.3	1644.2	1612.0	1589.5
30°	1689.2	1649.0	1573.5	1533.3	1507.6
32.5°	1626.5	1579.9	1501.1	1452.9	1428.8
35°	1560.6	1509.2	1428.8	1374.2	1345.2
37.5°	1491.5	1438.5	1350.1	1290.6	1261.7
40°	1417.6	1364.5	1272.9	1205.4	1176.5
42.5°	1346.8	1290.6	1194.2	1125.0	1094.5
45°	1272.9	1213.4	1117.0	1038.3	1009.3
47.5°	1197.4	1136.3	1036.7	954.7	922.5
50°	1120.2	1057.5	954.7	874.3	843.8
52.5°	1041.5	980.4	874.3	792.4	760.2
55°	964.3	900.0	795.6	712.0	681.5
57.5°	888.8	821.3	718.4	633.2	610.7
60°	806.8	742.5	639.7	556.1	530.4
62.5°	732.9	665.4	559.3	483.8	464.5
65°	655.7	586.6	483.8	414.7	395.4
67.5°	575.4	509.5	413.1	352.0	329.5
70°	499.8	432.3	340.7	287.7	271.6
72.5°	419.5	360.0	274.8	231.4	217.0
75°	348.8	289.3	213.8	176.8	167.1
77.5°	274.8	223.4	159.1	133.4	130.2
80°	204.1	157.5	109.3	104.5	102.9
82.5°	143.0	101.3	78.8	75.5	73.9
85°	86.8	54.6	49.8	46.6	46.6
87.5°	37.0	24.1	22.5	20.9	22.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)