

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: P1037748

Luminaire Tested: S124R3DS-B1020DB50-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1037748
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: S124R3DS-B1020DB50-4F0-XX-W2A-F
Description: Define 4 3in Regressed Direct Surface with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

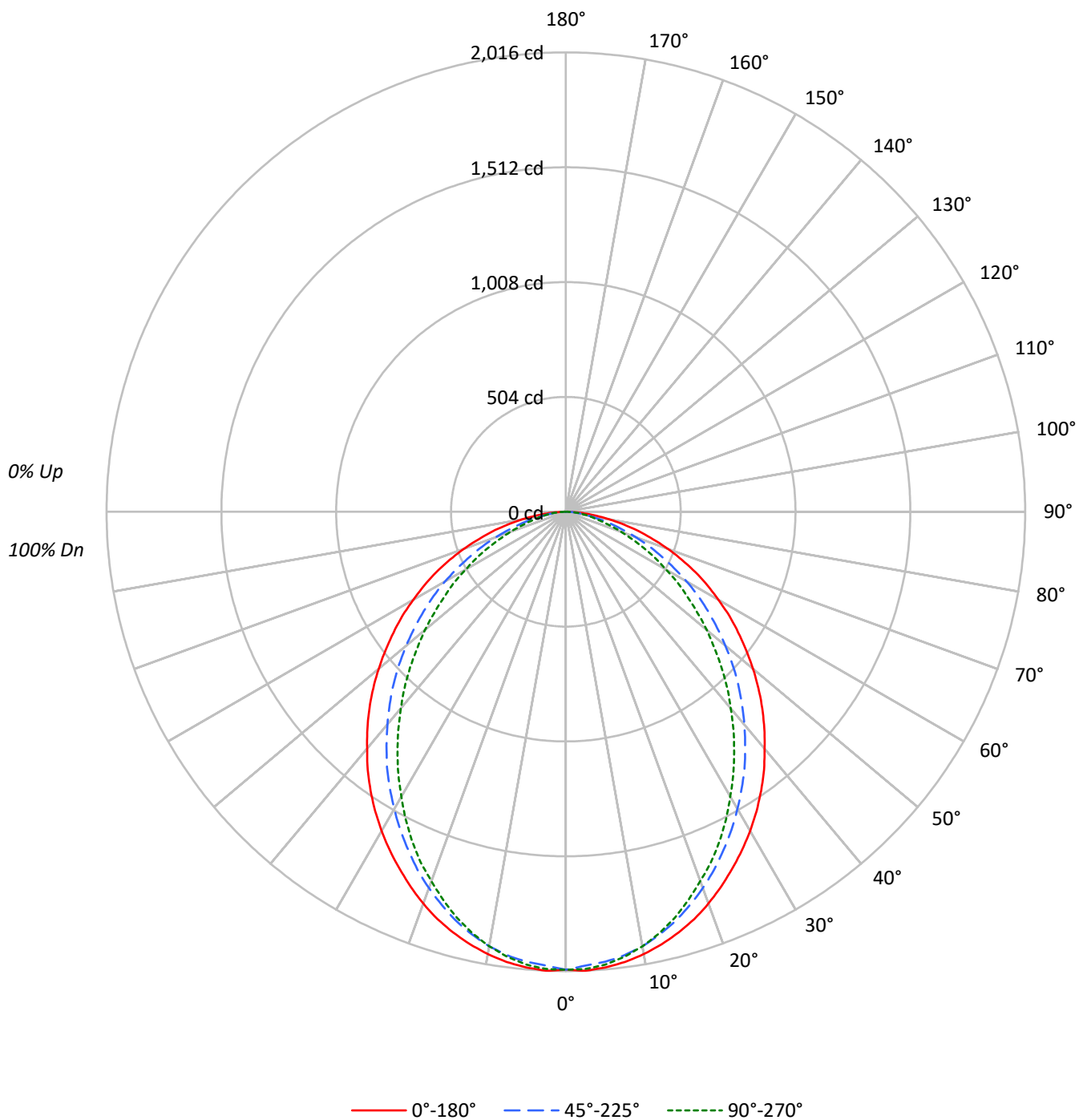
Lumens per Lamp: N/A
Luminaire Lumens: 4644.0 lumens
Efficiency: N/A
Efficacy: 75.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

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			
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°	16390	16390	16390
5°	16427	16226	16326
10°	16324	16031	16031
15°	16136	15694	15577
20°	15879	15251	14971
25°	15549	14732	14359
30°	15229	14186	13592
35°	14875	13619	12823
40°	14448	12974	11992
45°	14055	12335	11146
50°	13607	11596	10249
55°	13128	10830	9277
60°	12600	9989	8283
65°	12115	8938	7305
70°	11411	7780	6201
75°	10523	6449	5044
80°	9176	4912	4626
85°	7775	4463	4173

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14055 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.0	4.1
10°-20°	527.0	11.3
20°-30°	760.8	16.4
30°-40°	862.2	18.6
40°-50°	832.5	17.9
50°-60°	692.1	14.9
60°-70°	477.7	10.3
70°-80°	241.4	5.2
80°-90°	61.3	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°	1476.7	31.8
0°-40°	2339.0	50.4
0°-60°	3863.6	83.2
0°-90°	4644.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4644.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2010	2010	2010	2010	2010	
5°	2007	2001	1982	1998	1994	190
15°	1911	1898	1859	1856	1845	539
25°	1728	1700	1637	1611	1596	796
35°	1494	1445	1368	1316	1288	934
45°	1219	1162	1070	994	966	940
55°	923	862	762	682	652	826
65°	628	562	463	397	379	620
75°	334	277	205	169	160	352
85°	83	52	48	45	45	96
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2009.9	2009.9	2009.9	2009.9	2009.9
2.5°	2016.0	2009.9	1992.9	2009.9	2008.3
5°	2006.8	2000.6	1982.2	1997.6	1994.5
7.5°	1992.9	1986.8	1963.7	1974.5	1969.8
10°	1971.4	1963.7	1936.0	1942.1	1936.0
12.5°	1943.7	1934.5	1900.6	1903.7	1894.4
15°	1911.4	1897.5	1859.0	1856.0	1845.2
17.5°	1874.4	1854.4	1809.8	1802.1	1786.7
20°	1829.8	1809.8	1757.5	1745.2	1725.2
22.5°	1780.6	1757.5	1700.5	1680.5	1665.1
25°	1728.2	1700.5	1637.4	1611.3	1595.9
27.5°	1674.4	1640.5	1574.3	1543.6	1522.0
30°	1617.4	1579.0	1506.6	1468.2	1443.5
32.5°	1557.4	1512.8	1437.4	1391.2	1368.1
35°	1494.3	1445.1	1368.1	1315.8	1288.1
37.5°	1428.1	1377.4	1292.7	1235.8	1208.1
40°	1357.3	1306.6	1218.8	1154.2	1126.5
42.5°	1289.6	1235.8	1143.4	1077.3	1048.0
45°	1218.8	1161.9	1069.6	994.2	966.5
47.5°	1146.5	1088.0	992.6	914.1	883.4
50°	1072.6	1012.6	914.1	837.2	807.9
52.5°	997.2	938.8	837.2	758.7	727.9
55°	923.4	861.8	761.8	681.8	652.5
57.5°	851.0	786.4	687.9	606.3	584.8
60°	772.6	711.0	612.5	532.5	507.9
62.5°	701.8	637.1	535.6	463.2	444.8
65°	627.9	561.7	463.2	397.0	378.6
67.5°	550.9	487.8	395.5	337.0	315.5
70°	478.6	414.0	326.3	275.5	260.1
72.5°	401.7	344.7	263.2	221.6	207.8
75°	334.0	277.0	204.7	169.3	160.1
77.5°	263.2	213.9	152.4	127.7	124.7
80°	195.4	150.8	104.6	100.0	98.5
82.5°	137.0	97.0	75.4	72.3	70.8
85°	83.1	52.3	47.7	44.6	44.6
87.5°	35.4	23.1	21.5	20.0	21.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)