

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: P998732

Luminaire Tested: S124R3DR-B1020DB30-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P998732
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-B1020DB30-4F0-XX-W2A-F
Description: Define 4 3in Regressed Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647
Light Source: -
Ballast/Driver: -

Summary

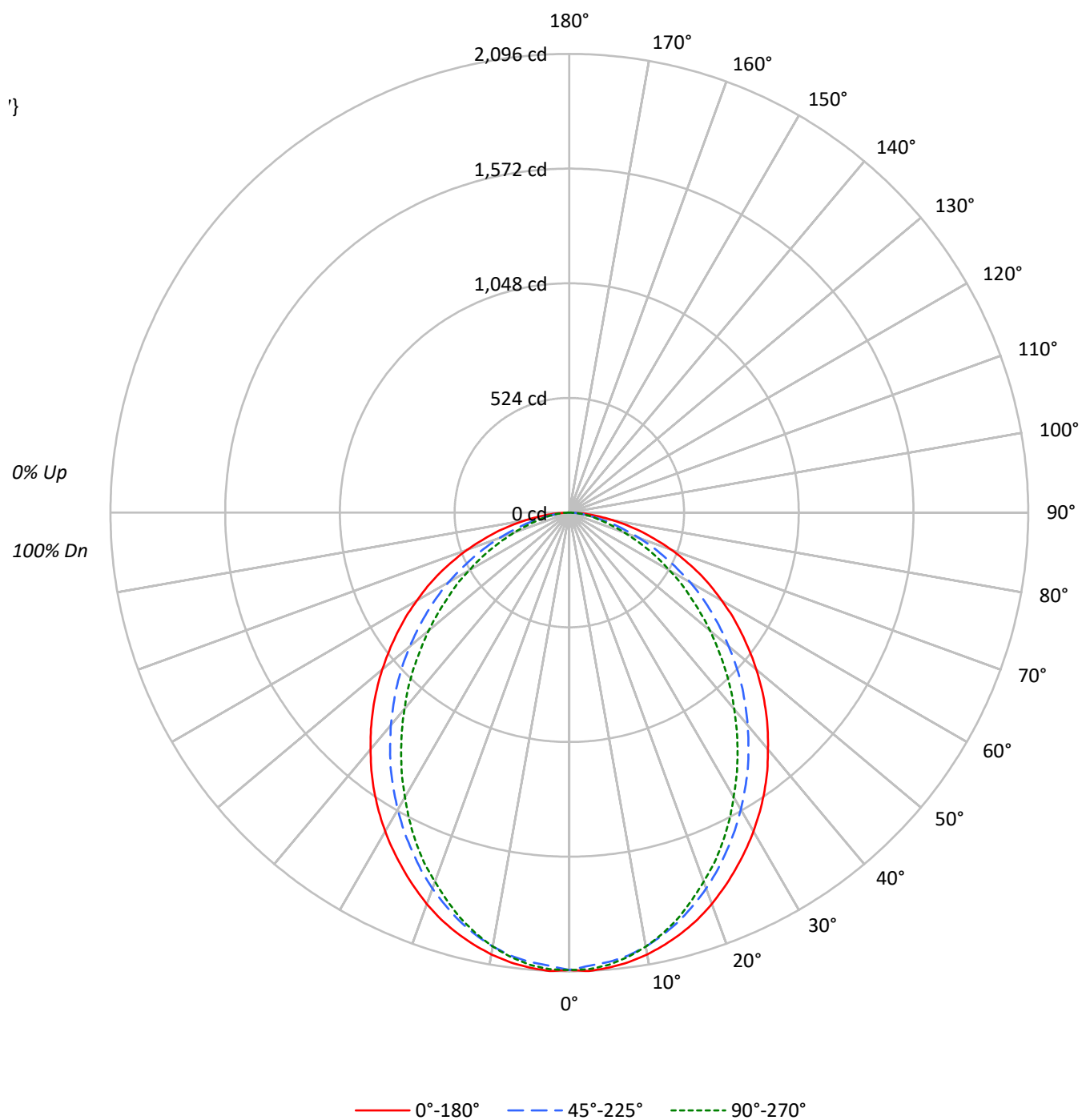
Lumens per Lamp: N/A
Luminaire Lumens: 4829.0 lumens
Efficiency: N/A
Efficacy: 78.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

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°	17042	17042	17042
5°	17081	16871	16976
10°	16974	16669	16669
15°	16779	16320	16198
20°	16511	15859	15567
25°	16169	15320	14931
30°	15837	14751	14133
35°	15468	14162	13333
40°	15024	13491	12469
45°	14616	12826	11590
50°	14150	12058	10658
55°	13651	11261	9646
60°	13101	10387	8613
65°	12598	9294	7596
70°	11866	8090	6447
75°	10942	6705	5243
80°	9542	5109	4809
85°	8084	4641	4341

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14616 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.5	4.1
10°-20°	547.9	11.3
20°-30°	791.1	16.4
30°-40°	896.6	18.6
40°-50°	865.7	17.9
50°-60°	719.7	14.9
60°-70°	496.8	10.3
70°-80°	251.0	5.2
80°-90°	63.7	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°	1535.6	31.8
0°-40°	2432.1	50.4
0°-60°	4017.5	83.2
0°-90°	4829.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4829.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2090	2090	2090	2090	2090	
5°	2087	2080	2061	2077	2074	198
15°	1988	1973	1933	1930	1919	560
25°	1797	1768	1703	1676	1660	828
35°	1554	1503	1423	1368	1339	971
45°	1267	1208	1112	1034	1005	977
55°	960	896	792	709	678	859
65°	653	584	482	413	394	645
75°	347	288	213	176	166	366
85°	86	54	50	46	46	100
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2089.9	2089.9	2089.9	2089.9	2089.9
2.5°	2096.3	2089.9	2072.3	2089.9	2088.3
5°	2086.7	2080.3	2061.1	2077.1	2073.9
7.5°	2072.3	2065.9	2041.9	2053.1	2048.3
10°	2049.9	2041.9	2013.1	2019.5	2013.1
12.5°	2021.1	2011.5	1976.3	1979.5	1969.9
15°	1987.5	1973.1	1933.1	1929.9	1918.7
17.5°	1949.1	1928.3	1881.9	1873.9	1857.9
20°	1902.7	1881.9	1827.5	1814.7	1793.9
22.5°	1851.5	1827.5	1768.3	1747.5	1731.5
25°	1797.1	1768.3	1702.7	1675.5	1659.5
27.5°	1741.1	1705.9	1637.1	1605.1	1582.6
30°	1681.9	1641.9	1566.6	1526.6	1501.0
32.5°	1619.5	1573.0	1494.6	1446.6	1422.6
35°	1553.8	1502.6	1422.6	1368.2	1339.4
37.5°	1485.0	1432.2	1344.2	1285.0	1256.2
40°	1411.4	1358.6	1267.4	1200.2	1171.4
42.5°	1341.0	1285.0	1189.0	1120.2	1089.8
45°	1267.4	1208.2	1112.2	1033.8	1005.0
47.5°	1192.2	1131.4	1032.2	950.5	918.5
50°	1115.4	1053.0	950.5	870.5	840.1
52.5°	1037.0	976.2	870.5	788.9	756.9
55°	960.2	896.1	792.1	708.9	678.5
57.5°	884.9	817.7	715.3	630.5	608.1
60°	803.3	739.3	636.9	553.7	528.1
62.5°	729.7	662.5	556.9	481.7	462.5
65°	652.9	584.1	481.7	412.9	393.7
67.5°	572.9	507.3	411.3	350.5	328.1
70°	497.7	430.5	339.3	286.4	270.4
72.5°	417.7	358.5	273.6	230.4	216.0
75°	347.3	288.0	212.8	176.0	166.4
77.5°	273.6	222.4	158.4	132.8	129.6
80°	203.2	156.8	108.8	104.0	102.4
82.5°	142.4	100.8	78.4	75.2	73.6
85°	86.4	54.4	49.6	46.4	46.4
87.5°	36.8	24.0	22.4	20.8	22.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)