

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: P1024812

Luminaire Tested: S124DIP-B1020D1035UB27-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024812
REPORT IS A COMBINATION OF REPORTS P995127 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1035UB27-4F0-XX-W2A-F4
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

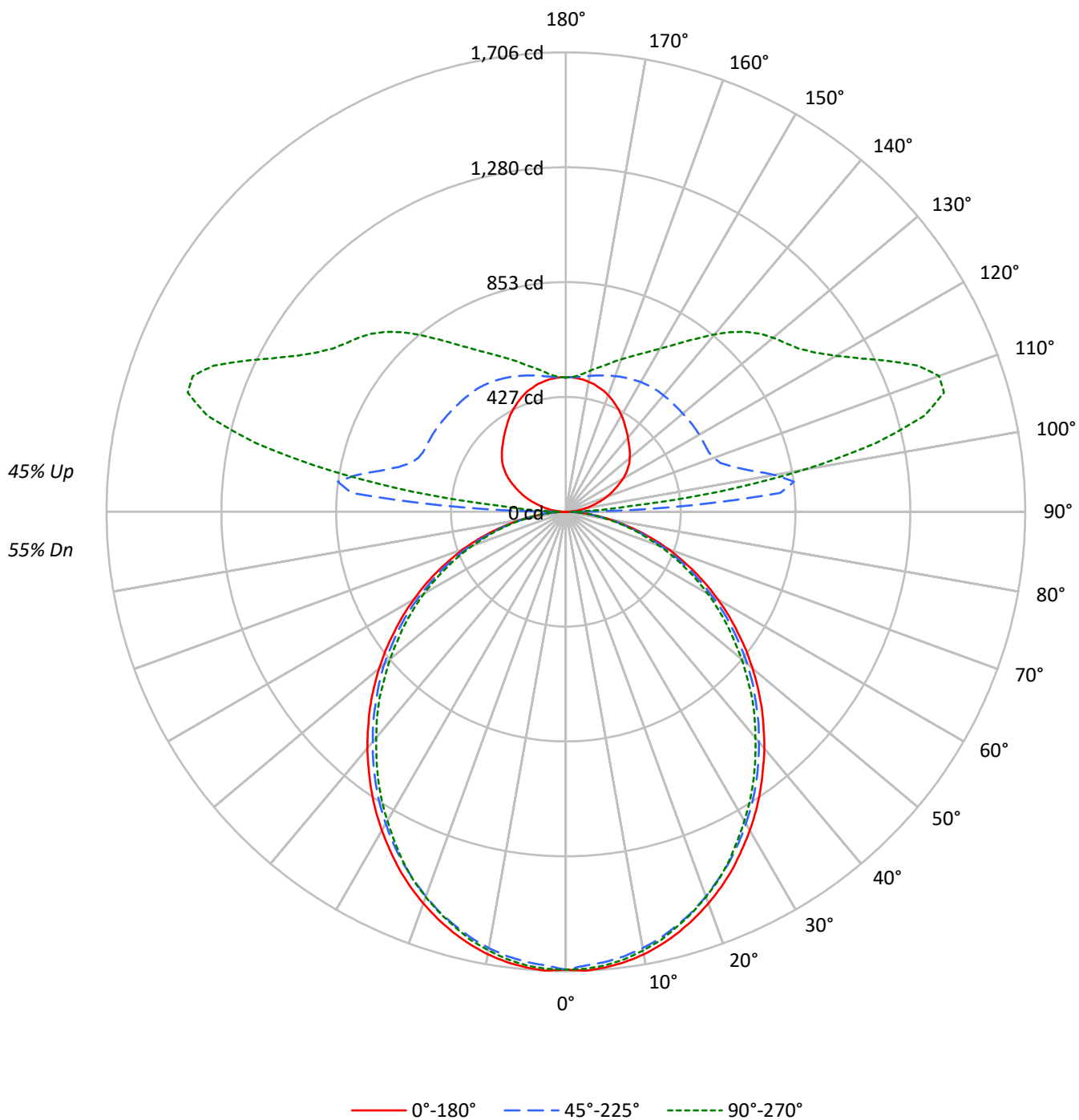
Lumens per Lamp: N/A
Luminaire Lumens: 8005.3 lumens
Efficiency: N/A
Efficacy: 106.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 75.3
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60
1	99	94	90	87	91	88	84	81	75	73	70	64	62	60	53	52	51
2	90	82	76	71	83	77	71	67	66	62	58	56	53	50	47	45	43
3	82	72	65	59	76	68	61	56	58	53	49	50	46	43	42	39	36
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	31
5	69	57	49	43	64	53	46	41	46	41	36	40	35	32	33	30	27
6	64	51	43	37	59	48	41	35	42	36	32	36	31	28	30	27	24
7	59	46	38	33	54	43	36	31	38	32	28	33	28	25	28	24	21
8	55	42	34	29	51	40	32	28	35	29	25	30	25	22	25	22	19
9	51	38	31	26	47	36	29	25	32	26	22	27	23	20	24	20	17
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	22	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13864	13864	13864
5°	13876	13466	13482
10°	13758	13091	13000
15°	13561	12648	12456
20°	13310	12167	11894
25°	13026	11658	11288
30°	12684	11109	10623
35°	12329	10547	9980
40°	11960	9942	9296
45°	11573	9336	8657
50°	11144	8747	7948
55°	10678	8061	7246
60°	10201	7308	6513
65°	9655	6530	5688
70°	9027	5595	4803
75°	8086	4509	3847
80°	6893	3261	2707
85°	5356	1814	1457

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11573 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.3	2.0
10°-20°	451.5	5.6
20°-30°	664.5	8.3
30°-40°	772.4	9.6
40°-50°	772.3	9.6
50°-60°	675.5	8.4
60°-70°	501.5	6.3
70°-80°	284.5	3.6
80°-90°	83.4	1.0
90°-100°	370.4	4.6
100°-110°	753.4	9.4
110°-120°	671.5	8.4
120°-130°	564.1	7.0
130°-140°	470.7	5.9
140°-150°	359.5	4.5
150°-160°	252.7	3.2
160°-170°	148.6	1.9
170°-180°	48.3	0.6
0°-30°	1276.2	15.9
0°-40°	2048.6	25.6
0°-60°	3496.5	43.7
0°-90°	4365.9	54.5
90°-120°	1795.4	22.4
90°-150°	3189.7	39.8
90°-180°	3639.0	45.5
0°-180°	8005.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1700	1700	1700	1700	1700	
5°	1699	1693	1678	1693	1691	161
15°	1617	1612	1591	1599	1595	456
25°	1465	1455	1436	1437	1432	674
35°	1260	1251	1232	1222	1215	788
45°	1029	1019	997	982	978	793
55°	778	774	755	738	730	697
65°	527	520	507	493	486	522
75°	281	274	267	262	260	298
85°	74	74	71	71	70	79
90°	1	8	18	20	21	7
95°	32	102	798	395	239	35
105°	115	166	643	1384	1378	122
115°	202	253	573	1101	1324	200
125°	281	334	570	937	1056	251
135°	334	398	565	832	944	258
145°	385	441	562	702	771	242
155°	438	473	547	619	646	202
165°	477	492	524	555	563	135
175°	498	499	503	510	508	47
180°	499	499	499	499	499	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1700.2	1700.2	1700.2	1700.2	1700.2
2.5°	1705.7	1701.6	1686.6	1700.2	1698.9
5°	1698.9	1693.4	1678.4	1693.4	1690.7
7.5°	1686.6	1681.2	1664.8	1677.1	1675.7
10°	1668.9	1663.5	1645.7	1656.6	1653.9
12.5°	1645.7	1640.3	1621.2	1633.5	1629.4
15°	1617.1	1611.7	1591.3	1599.4	1595.3
17.5°	1584.4	1577.6	1558.6	1564.0	1561.3
20°	1547.7	1540.8	1520.4	1524.5	1521.8
22.5°	1508.1	1498.6	1478.2	1486.3	1480.9
25°	1464.6	1455.0	1435.9	1437.3	1431.9
27.5°	1415.5	1406.0	1388.3	1385.5	1378.7
30°	1366.5	1355.6	1337.8	1332.4	1325.6
32.5°	1314.7	1305.2	1286.1	1279.3	1272.5
35°	1260.2	1250.7	1231.6	1222.0	1215.2
37.5°	1203.0	1194.8	1174.4	1164.8	1155.3
40°	1147.1	1136.2	1115.8	1102.2	1095.3
42.5°	1087.2	1081.7	1058.6	1042.2	1038.1
45°	1028.6	1019.1	997.3	982.3	978.2
47.5°	967.3	960.5	940.0	923.7	912.8
50°	904.6	899.2	880.1	861.0	852.8
52.5°	843.3	836.5	816.1	799.7	788.8
55°	777.9	773.8	754.8	738.4	730.2
57.5°	716.6	712.5	693.4	677.1	668.9
60°	652.6	645.8	628.1	615.8	609.0
62.5°	589.9	584.5	565.4	554.5	547.7
65°	527.2	520.4	506.8	493.2	486.4
67.5°	463.2	457.8	444.1	430.5	429.1
70°	404.6	395.1	384.2	373.3	369.2
72.5°	342.0	332.4	324.2	316.1	312.0
75°	280.6	273.8	267.0	261.6	260.2
77.5°	220.7	218.0	211.2	209.8	205.7
80°	167.6	163.5	160.8	158.0	156.7
82.5°	115.8	114.4	114.4	113.1	111.7
85°	73.6	73.6	70.8	70.8	69.5
87.5°	35.4	34.1	32.7	32.7	32.7
90°	1.0	7.8	17.6	19.6	20.6
92.5°	13.7	75.4	384.1	126.8	89.2
95°	32.3	101.9	798.5	395.3	239.1
97.5°	53.9	112.6	854.3	807.3	574.1
100°	74.5	127.4	787.7	1116.8	898.4
102.5°	94.1	145.0	704.4	1310.9	1180.6
105°	114.6	166.1	642.7	1383.9	1378.5
107.5°	137.2	187.6	602.5	1361.8	1472.5
110°	159.7	209.2	583.9	1283.4	1474.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	181.3	230.8	575.1	1187.4	1416.7
115°	201.8	253.2	573.1	1101.2	1323.6
117.5°	223.4	274.3	572.2	1033.6	1232.5
120°	244.9	294.9	572.2	988.0	1158.0
122.5°	264.5	315.0	571.2	958.2	1099.3
125°	281.2	334.1	570.2	937.2	1056.2
127.5°	296.9	351.7	568.2	917.0	1028.7
130°	309.6	368.9	567.3	893.0	1005.2
132.5°	322.3	383.6	566.3	864.6	978.8
135°	334.1	397.8	565.3	831.8	944.5
137.5°	345.8	410.0	565.3	796.6	904.3
140°	358.6	421.2	564.3	762.2	860.2
142.5°	372.3	431.6	564.3	730.4	813.2
145°	385.0	440.9	562.4	701.5	771.0
147.5°	399.7	449.7	559.4	677.5	731.9
150°	413.4	458.0	556.5	655.4	699.5
152.5°	426.2	465.8	551.6	636.8	670.1
155°	437.9	472.8	546.7	619.2	645.6
157.5°	449.7	479.1	541.8	602.5	623.1
160°	460.5	484.5	535.9	585.9	602.5
162.5°	470.3	488.9	530.0	569.7	582.9
165°	477.1	491.8	524.2	555.0	563.3
167.5°	485.0	494.2	518.3	542.3	547.7
170°	489.9	496.2	512.4	529.6	533.0
172.5°	494.8	497.7	506.5	518.3	518.3
175°	497.7	498.7	502.6	509.5	507.5
177.5°	499.7	498.7	499.7	503.1	499.7
180°	498.7	498.7	498.7	498.7	498.7

(END OF REPORT)