

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: P1024811

Luminaire Tested: S124DIP-B1020D1035UB27-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024811
REPORT IS A COMBINATION OF REPORTS P995126 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1035UB27-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

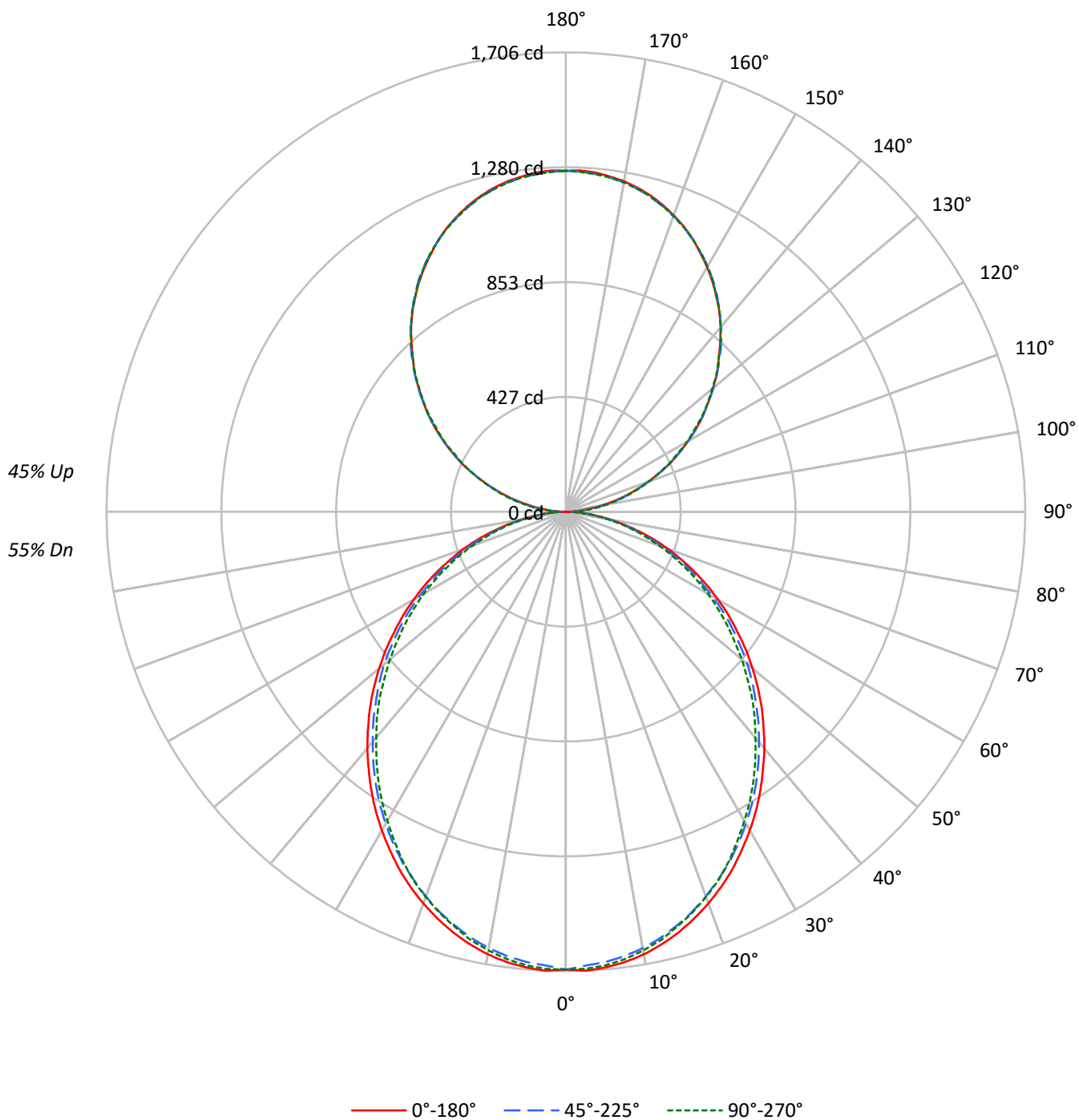
Lumens per Lamp: N/A
Luminaire Lumens: 7881.0 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	101	101	101	101	86	86	86	73	73	73	61	61	61
1	99	95	91	87	92	88	85	81	76	73	71	64	63	61	54	53	52
2	90	83	76	71	83	77	71	67	66	62	59	57	53	51	47	45	43
3	82	73	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37
4	75	64	56	50	70	60	53	47	52	46	42	45	40	37	38	34	32
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	30	28
6	64	51	43	37	59	48	41	35	42	36	32	36	32	28	31	27	24
7	59	46	38	33	55	44	36	31	38	32	28	33	28	25	28	24	22
8	55	42	34	29	51	40	33	28	35	29	25	30	26	22	26	22	19
9	51	39	31	26	47	36	29	25	32	26	22	28	23	20	24	20	18
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	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	5.7
20°-30°	664.5	8.4
30°-40°	772.4	9.8
40°-50°	772.3	9.8
50°-60°	675.5	8.6
60°-70°	501.5	6.4
70°-80°	284.5	3.6
80°-90°	84.2	1.1
90°-100°	82.6	1.0
100°-110°	247.3	3.1
110°-120°	420.1	5.3
120°-130°	554.0	7.0
130°-140°	622.3	7.9
140°-150°	611.6	7.8
150°-160°	514.4	6.5
160°-170°	342.3	4.3
170°-180°	119.8	1.5
0°-30°	1276.2	16.2
0°-40°	2048.6	26.0
0°-60°	3496.5	44.4
0°-90°	4366.7	55.4
90°-120°	749.9	9.5
90°-150°	2537.8	32.2
90°-180°	3514.0	44.6
0°-180°	7881.0	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°	3	14	22	27	29	9
95°	59	68	74	77	77	64
105°	228	229	233	236	239	242
115°	427	427	425	424	423	421
125°	622	622	621	619	617	554
135°	802	808	808	806	803	621
145°	975	979	980	979	976	610
155°	1117	1117	1116	1120	1116	514
165°	1216	1213	1211	1217	1213	343
175°	1265	1260	1259	1266	1259	120
180°	1267	1267	1267	1267	1267	

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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°	2.9	13.7	21.6	27.4	29.4
92.5°	25.5	38.2	43.1	46.0	47.0
95°	58.8	67.6	74.4	77.4	77.4
97.5°	94.0	101.9	109.7	113.6	113.6
100°	137.1	141.1	149.9	151.8	151.8
102.5°	182.2	183.2	191.0	194.0	194.9
105°	228.2	229.2	233.1	236.1	239.0
107.5°	276.2	277.2	278.2	282.1	281.1
110°	325.2	327.2	326.2	324.2	327.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	376.2	376.2	374.2	374.2	374.2
115°	427.1	427.1	425.1	424.2	423.2
117.5°	475.1	475.1	474.1	471.2	468.2
120°	523.1	527.0	524.1	519.2	521.1
122.5°	573.0	574.0	573.0	570.1	565.2
125°	622.0	622.0	621.0	619.1	617.1
127.5°	666.1	669.0	667.1	665.1	664.1
130°	713.1	716.1	716.1	714.1	710.2
132.5°	761.1	763.1	762.1	760.1	759.2
135°	802.3	808.1	808.1	806.2	803.2
137.5°	848.3	851.2	853.2	850.3	851.2
140°	894.3	896.3	896.3	895.3	894.3
142.5°	936.5	938.4	937.4	937.4	937.4
145°	974.7	978.6	979.6	978.6	975.6
147.5°	1013.9	1018.7	1017.8	1016.8	1015.8
150°	1049.1	1053.0	1053.0	1053.0	1052.1
152.5°	1082.4	1084.4	1085.4	1088.3	1085.4
155°	1116.7	1116.7	1115.7	1119.6	1115.7
157.5°	1146.1	1144.1	1144.1	1147.1	1144.1
160°	1171.6	1170.6	1169.6	1172.5	1167.6
162.5°	1195.1	1192.1	1191.2	1197.0	1192.1
165°	1215.6	1212.7	1210.7	1216.6	1212.7
167.5°	1232.3	1228.4	1228.4	1234.3	1228.4
170°	1246.0	1241.1	1242.1	1248.0	1241.1
172.5°	1255.8	1251.9	1251.9	1258.7	1251.9
175°	1264.6	1259.7	1258.7	1265.6	1258.7
177.5°	1268.5	1263.6	1263.6	1270.5	1262.7
180°	1266.6	1266.6	1266.6	1266.6	1266.6

(END OF REPORT)