

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: P1024839

Luminaire Tested: S124DIP-B1020D1035UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024839
REPORT IS A COMBINATION OF REPORTS P995169 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1035UB40-4F0-XX-W2A-F4
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

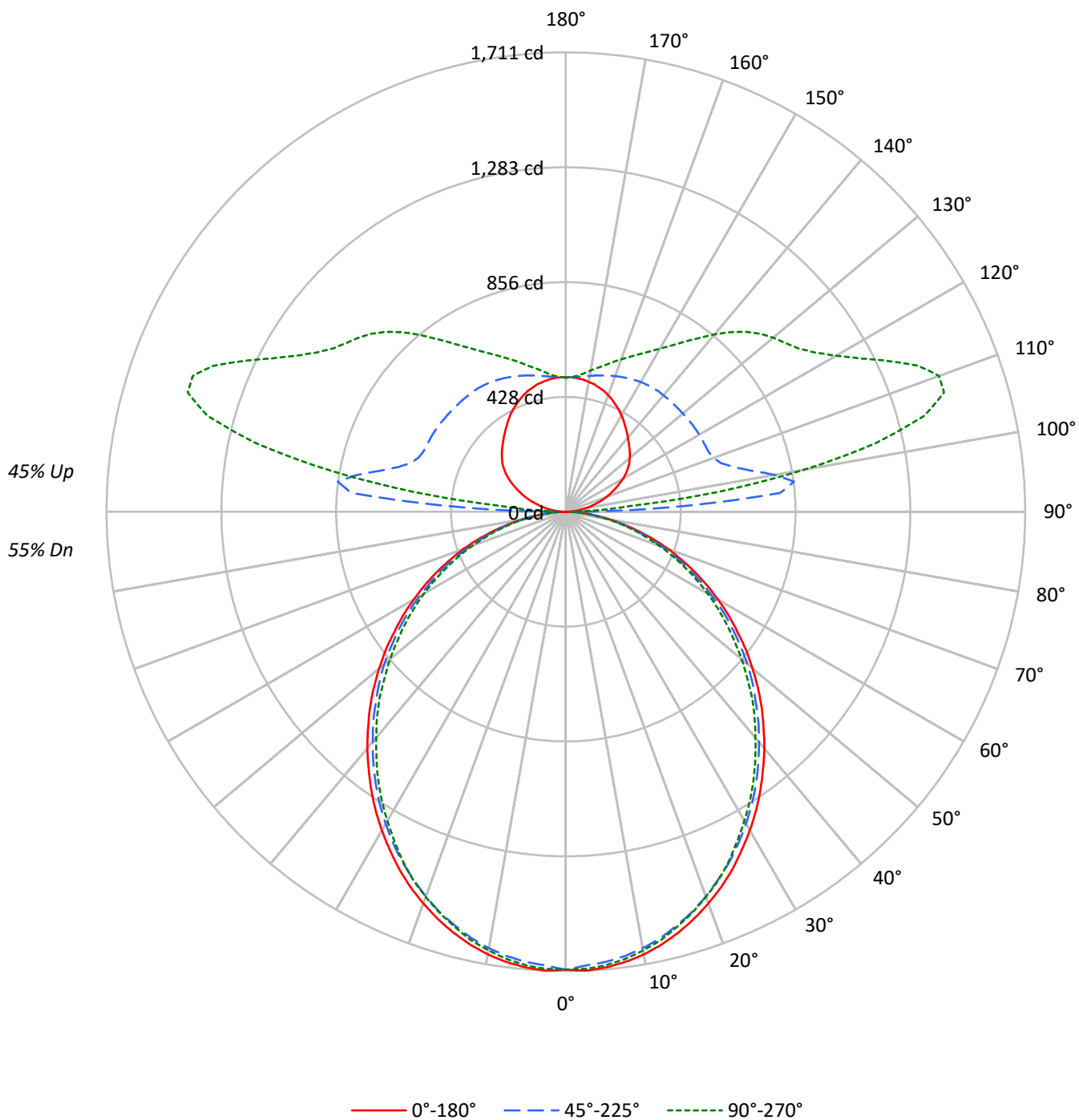
Lumens per Lamp: N/A
Luminaire Lumens: 8029.3 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	13906	13906	13906
5°	13917	13506	13522
10°	13800	13130	13039
15°	13602	12685	12494
20°	13349	12203	11929
25°	13064	11693	11321
30°	12721	11142	10654
35°	12365	10579	10010
40°	11995	9972	9324
45°	11608	9363	8683
50°	11177	8773	7973
55°	10710	8084	7267
60°	10231	7329	6533
65°	9684	6550	5705
70°	9053	5611	4818
75°	8112	4522	3859
80°	6914	3269	2714
85°	5370	1822	1461

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11608 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.7	2.0
10°-20°	452.8	5.6
20°-30°	666.4	8.3
30°-40°	774.7	9.6
40°-50°	774.6	9.6
50°-60°	677.5	8.4
60°-70°	503.0	6.3
70°-80°	285.4	3.6
80°-90°	83.7	1.0
90°-100°	371.5	4.6
100°-110°	755.7	9.4
110°-120°	673.6	8.4
120°-130°	565.8	7.0
130°-140°	472.2	5.9
140°-150°	360.6	4.5
150°-160°	253.5	3.2
160°-170°	149.1	1.9
170°-180°	48.5	0.6
0°-30°	1280.0	15.9
0°-40°	2054.7	25.6
0°-60°	3506.8	43.7
0°-90°	4378.9	54.5
90°-120°	1800.8	22.4
90°-150°	3199.4	39.8
90°-180°	3650.0	45.5
0°-180°	8029.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1705	1705	1705	1705	1705	
5°	1704	1698	1683	1698	1696	162
15°	1622	1616	1596	1604	1600	457
25°	1469	1459	1440	1442	1436	676
35°	1264	1254	1235	1226	1219	790
45°	1032	1022	1000	985	981	795
55°	780	776	757	741	732	699
65°	529	522	508	495	488	523
75°	282	275	268	262	261	299
85°	74	74	71	71	70	79
90°	1	8	18	20	21	7
95°	32	102	801	396	240	36
105°	115	167	645	1388	1383	122
115°	202	254	575	1105	1328	201
125°	282	335	572	940	1059	251
135°	335	399	567	834	947	259
145°	386	442	564	704	773	242
155°	439	474	548	621	648	203
165°	479	493	526	557	565	135
175°	499	500	504	511	509	47
180°	500	500	500	500	500	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1705.3	1705.3	1705.3	1705.3	1705.3
2.5°	1710.8	1706.7	1691.6	1705.3	1703.9
5°	1703.9	1698.5	1683.4	1698.5	1695.7
7.5°	1691.6	1686.2	1669.8	1682.1	1680.7
10°	1673.9	1668.4	1650.6	1661.6	1658.8
12.5°	1650.6	1645.2	1626.1	1638.4	1634.3
15°	1622.0	1616.5	1596.0	1604.2	1600.1
17.5°	1589.2	1582.3	1563.2	1568.7	1565.9
20°	1552.3	1545.4	1524.9	1529.0	1526.3
22.5°	1512.6	1503.1	1482.6	1490.8	1485.3
25°	1468.9	1459.3	1440.2	1441.6	1436.1
27.5°	1419.7	1410.2	1392.4	1389.7	1382.8
30°	1370.5	1359.6	1341.8	1336.4	1329.5
32.5°	1318.6	1309.0	1289.9	1283.1	1276.2
35°	1263.9	1254.4	1235.3	1225.7	1218.9
37.5°	1206.6	1198.4	1177.9	1168.3	1158.7
40°	1150.5	1139.6	1119.1	1105.4	1098.6
42.5°	1090.4	1084.9	1061.7	1045.3	1041.2
45°	1031.7	1022.1	1000.2	985.2	981.1
47.5°	970.2	963.3	942.8	926.4	915.5
50°	907.3	901.8	882.7	863.6	855.4
52.5°	845.8	839.0	818.5	802.1	791.2
55°	780.2	776.1	757.0	740.6	732.4
57.5°	718.7	714.6	695.5	679.1	670.9
60°	654.5	647.7	629.9	617.6	610.8
62.5°	591.7	586.2	567.1	556.1	549.3
65°	528.8	522.0	508.3	494.6	487.8
67.5°	464.6	459.1	445.5	431.8	430.4
70°	405.8	396.3	385.3	374.4	370.3
72.5°	343.0	333.4	325.2	317.0	312.9
75°	281.5	274.7	267.8	262.4	261.0
77.5°	221.4	218.6	211.8	210.4	206.3
80°	168.1	164.0	161.2	158.5	157.1
82.5°	116.1	114.8	114.8	113.4	112.0
85°	73.8	73.8	71.1	71.1	69.7
87.5°	35.5	34.2	32.8	32.8	32.8
90°	1.0	7.9	17.7	19.7	20.6
92.5°	13.8	75.6	385.2	127.2	89.4
95°	32.4	102.2	800.9	396.5	239.8
97.5°	54.0	113.0	856.9	809.8	575.9
100°	74.7	127.8	790.1	1120.2	901.1
102.5°	94.3	145.4	706.6	1314.8	1184.2
105°	115.0	166.6	644.6	1388.1	1382.7
107.5°	137.6	188.2	604.4	1366.0	1477.0
110°	160.2	209.8	585.7	1287.4	1479.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	181.8	231.4	576.8	1191.0	1421.0
115°	202.4	254.0	574.9	1104.6	1327.6
117.5°	224.1	275.2	573.9	1036.8	1236.2
120°	245.7	295.8	573.9	991.0	1161.5
122.5°	265.3	316.0	572.9	961.1	1102.6
125°	282.0	335.1	571.9	940.0	1059.3
127.5°	297.8	352.8	570.0	919.8	1031.8
130°	310.5	370.0	569.0	895.8	1008.2
132.5°	323.3	384.8	568.0	867.2	981.7
135°	335.1	399.0	567.0	834.3	947.3
137.5°	346.9	411.2	567.0	798.9	907.0
140°	359.7	422.6	566.0	764.6	862.8
142.5°	373.4	432.9	566.0	732.6	815.6
145°	386.2	442.2	564.1	703.6	773.4
147.5°	400.9	451.0	561.1	679.5	734.1
150°	414.7	459.4	558.2	657.4	701.6
152.5°	427.5	467.2	553.3	638.8	672.2
155°	439.3	474.2	548.3	621.1	647.6
157.5°	451.1	480.5	543.4	604.3	625.0
160°	461.9	485.9	537.5	587.7	604.4
162.5°	471.7	490.4	531.6	571.4	584.7
165°	478.6	493.4	525.7	556.7	565.1
167.5°	486.4	495.8	519.8	543.9	549.3
170°	491.3	497.8	514.0	531.2	534.6
172.5°	496.3	499.2	508.1	519.8	519.8
175°	499.2	500.2	504.1	511.0	509.0
177.5°	501.2	500.2	501.2	504.6	501.2
180°	500.2	500.2	500.2	500.2	500.2

(END OF REPORT)