

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: P1024838

Luminaire Tested: S124DIP-B1020D1035UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024838
REPORT IS A COMBINATION OF REPORTS P995168 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-F1
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

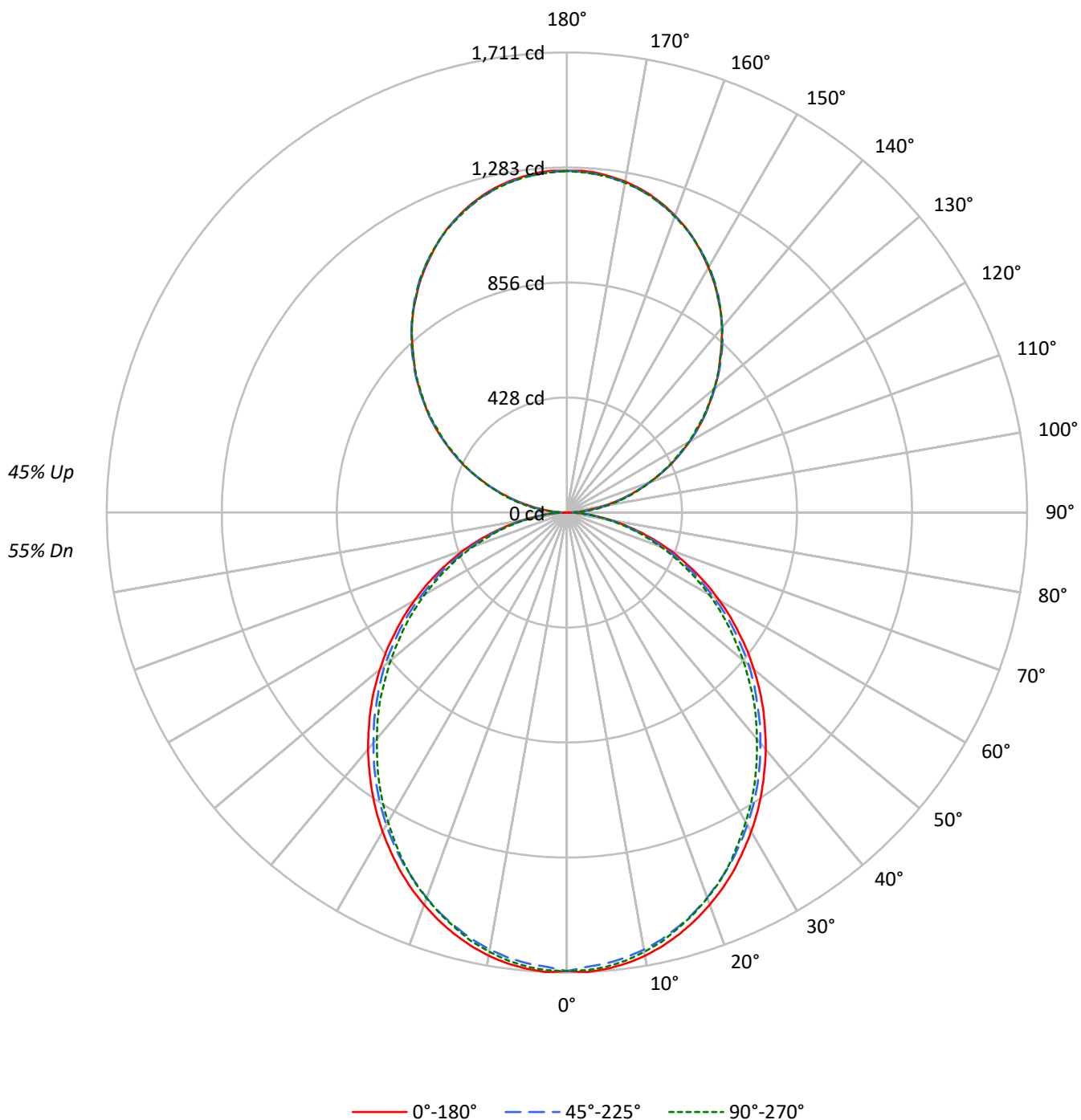
Lumens per Lamp: N/A
Luminaire Lumens: 7905.0 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	35	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°	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	5.7
20°-30°	666.4	8.4
30°-40°	774.7	9.8
40°-50°	774.6	9.8
50°-60°	677.5	8.6
60°-70°	503.0	6.4
70°-80°	285.4	3.6
80°-90°	84.5	1.1
90°-100°	82.8	1.0
100°-110°	248.1	3.1
110°-120°	421.4	5.3
120°-130°	555.8	7.0
130°-140°	624.2	7.9
140°-150°	613.5	7.8
150°-160°	516.0	6.5
160°-170°	343.3	4.3
170°-180°	120.2	1.5
0°-30°	1280.0	16.2
0°-40°	2054.7	26.0
0°-60°	3506.8	44.4
0°-90°	4379.7	55.4
90°-120°	752.3	9.5
90°-150°	2545.8	32.2
90°-180°	3525.0	44.6
0°-180°	7905.0	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°	3	14	22	28	30	9
95°	59	68	75	78	78	64
105°	229	230	234	237	240	243
115°	428	428	426	426	424	423
125°	624	624	623	621	619	556
135°	805	811	811	809	806	623
145°	978	982	983	982	979	612
155°	1120	1120	1119	1123	1119	516
165°	1219	1216	1214	1220	1216	344
175°	1269	1264	1263	1270	1263	120
180°	1270	1270	1270	1270	1270	

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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°	2.9	13.8	21.6	27.5	29.5
92.5°	25.5	38.3	43.2	46.2	47.2
95°	59.0	67.8	74.7	77.6	77.6
97.5°	94.3	102.2	110.1	114.0	114.0
100°	137.6	141.5	150.3	152.3	152.3
102.5°	182.8	183.8	191.6	194.6	195.5
105°	229.0	229.9	233.9	236.8	239.8
107.5°	277.1	278.1	279.1	283.0	282.0
110°	326.2	328.2	327.2	325.3	328.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	377.3	377.3	375.4	375.4	375.4
115°	428.4	428.4	426.5	425.5	424.5
117.5°	476.6	476.6	475.6	472.6	469.7
120°	524.7	528.7	525.7	520.8	522.8
122.5°	574.8	575.8	574.8	571.9	567.0
125°	624.0	624.0	623.0	621.0	619.1
127.5°	668.2	671.1	669.2	667.2	666.2
130°	715.4	718.3	718.3	716.3	712.4
132.5°	763.5	765.5	764.5	762.5	761.5
135°	804.8	810.7	810.7	808.7	805.8
137.5°	851.0	853.9	855.9	852.9	853.9
140°	897.1	899.1	899.1	898.1	897.1
142.5°	939.4	941.4	940.4	940.4	940.4
145°	977.7	981.6	982.6	981.6	978.7
147.5°	1017.0	1021.9	1021.0	1020.0	1019.0
150°	1052.4	1056.3	1056.3	1056.3	1055.3
152.5°	1085.8	1087.8	1088.8	1091.7	1088.8
155°	1120.2	1120.2	1119.2	1123.1	1119.2
157.5°	1149.7	1147.7	1147.7	1150.7	1147.7
160°	1175.2	1174.2	1173.3	1176.2	1171.3
162.5°	1198.8	1195.9	1194.9	1200.8	1195.9
165°	1219.4	1216.5	1214.5	1220.4	1216.5
167.5°	1236.1	1232.2	1232.2	1238.1	1232.2
170°	1249.9	1245.0	1246.0	1251.9	1245.0
172.5°	1259.7	1255.8	1255.8	1262.7	1255.8
175°	1268.6	1263.7	1262.7	1269.6	1262.7
177.5°	1272.5	1267.6	1267.6	1274.5	1266.6
180°	1270.5	1270.5	1270.5	1270.5	1270.5

(END OF REPORT)