

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: P1000617

Luminaire Tested: SA4XXDIP-B1020D1205UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000617
REPORT IS A COMBINATION OF REPORTS P995227 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1020D1205UB40-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

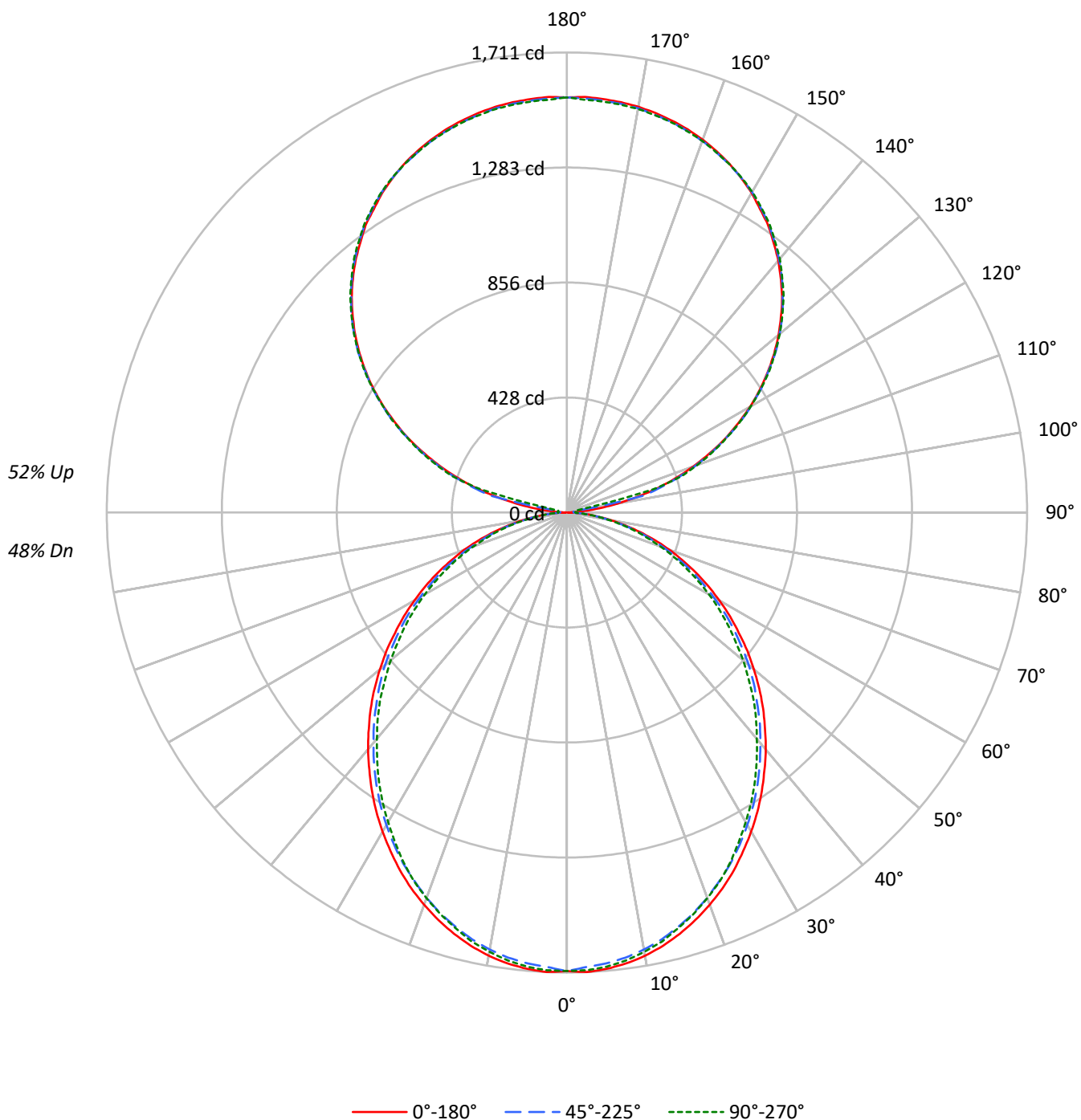
Lumens per Lamp: N/A
Luminaire Lumens: 9157.0 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 81.8
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

TEST NUMBER: P1000617

CATALOG NUMBER: SA4XXDIP-B1020D1205UB40-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1000617

CATALOG NUMBER: SA4XXDIP-B1020D1205UB40-4F0-XX-W2A-F

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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54
1	97	93	89	86	89	86	82	79	72	70	67	59	58	56	48	47	46
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	42	40	38
3	81	71	64	58	74	66	59	54	56	51	47	46	43	40	37	35	33
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28
5	68	56	48	42	62	52	45	40	44	39	34	37	33	29	30	27	25
6	62	50	42	36	57	47	40	34	40	34	30	33	29	26	27	24	22
7	58	45	38	32	53	42	35	30	36	30	26	30	26	23	25	22	19
8	54	41	34	28	49	38	31	27	33	27	23	28	23	20	23	20	17
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	16
10	47	35	27	23	43	32	26	21	28	23	19	24	19	16	20	16	14

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

TEST NUMBER: P1000617

CATALOG NUMBER: SA4XXDIP-B1020D1205UB40-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.7	1.8
10°-20°	452.8	4.9
20°-30°	666.4	7.3
30°-40°	774.7	8.5
40°-50°	774.6	8.5
50°-60°	677.5	7.4
60°-70°	503.0	5.5
70°-80°	285.4	3.1
80°-90°	84.9	0.9
90°-100°	51.2	0.6
100°-110°	337.5	3.7
110°-120°	644.4	7.0
120°-130°	818.1	8.9
130°-140°	875.1	9.6
140°-150°	818.3	8.9
150°-160°	659.9	7.2
160°-170°	425.6	4.6
170°-180°	146.7	1.6
0°-30°	1280.0	14.0
0°-40°	2054.7	22.4
0°-60°	3506.8	38.3
0°-90°	4380.2	47.8
90°-120°	1033.1	11.3
90°-150°	3544.6	38.7
90°-180°	4777.0	52.2
0°-180°	9157.0	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°	4	16	25	32	35	8
95°	64	24	25	32	34	78
105°	348	354	360	371	329	364
115°	649	652	651	654	654	639
125°	912	917	914	918	919	815
135°	1132	1130	1135	1137	1140	872
145°	1305	1308	1308	1309	1312	815
155°	1431	1432	1428	1433	1429	660
165°	1509	1503	1503	1512	1502	426
175°	1544	1537	1538	1548	1534	147
180°	1544	1544	1544	1544	1544	

TEST NUMBER: P1000617

CATALOG NUMBER: SA4XXDIP-B1020D1205UB40-4F0-XX-W2A-F

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°	3.5	16.2	25.4	32.3	34.6
92.5°	17.3	15.0	24.2	31.2	31.2
95°	63.5	24.2	25.4	32.3	33.5
97.5°	121.2	146.6	25.4	31.2	32.3
100°	189.4	210.1	50.8	31.2	32.3
102.5°	265.6	279.4	293.3	33.5	33.5
105°	347.5	354.5	360.2	370.6	329.1
107.5°	422.6	426.1	434.1	439.9	444.5
110°	498.8	502.3	509.2	511.5	515.0

TEST NUMBER: P1000617

CATALOG NUMBER: SA4XXDIP-B1020D1205UB40-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	572.7	579.6	581.9	580.8	585.4
115°	648.9	652.4	651.2	653.5	653.5
117.5°	717.0	721.6	725.1	723.9	723.9
120°	786.3	790.9	789.8	792.1	789.8
122.5°	851.0	853.3	855.6	856.7	854.4
125°	912.1	916.8	914.5	917.9	919.1
127.5°	971.0	972.2	978.0	976.8	975.6
130°	1027.6	1028.8	1032.2	1033.4	1033.4
132.5°	1079.6	1081.9	1086.5	1087.6	1086.5
135°	1131.5	1130.4	1135.0	1137.3	1139.6
137.5°	1177.7	1177.7	1183.5	1185.8	1184.6
140°	1222.7	1225.0	1227.4	1230.8	1232.0
142.5°	1263.1	1267.8	1268.9	1271.2	1271.2
145°	1304.7	1308.2	1308.2	1309.3	1311.6
147.5°	1337.0	1344.0	1342.8	1344.0	1345.1
150°	1372.8	1377.5	1376.3	1376.3	1377.5
152.5°	1402.9	1406.3	1404.0	1406.3	1405.2
155°	1430.6	1431.7	1428.3	1432.9	1429.4
157.5°	1454.8	1454.8	1450.2	1456.0	1450.2
160°	1475.6	1472.1	1471.0	1477.9	1471.0
162.5°	1494.1	1489.5	1488.3	1495.2	1487.1
165°	1509.1	1503.3	1503.3	1512.5	1502.2
167.5°	1521.8	1516.0	1514.9	1525.2	1513.7
170°	1532.2	1525.2	1526.4	1535.6	1524.1
172.5°	1539.1	1532.2	1533.3	1542.6	1529.9
175°	1543.7	1536.8	1537.9	1548.3	1534.5
177.5°	1547.2	1539.1	1541.4	1550.6	1536.8
180°	1543.7	1543.7	1543.7	1543.7	1543.7

(END OF REPORT)