

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: P1000803

Luminaire Tested: SA4XXDIP-B1020D810UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000803
REPORT IS A COMBINATION OF REPORTS P995416 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1020D810UB50-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

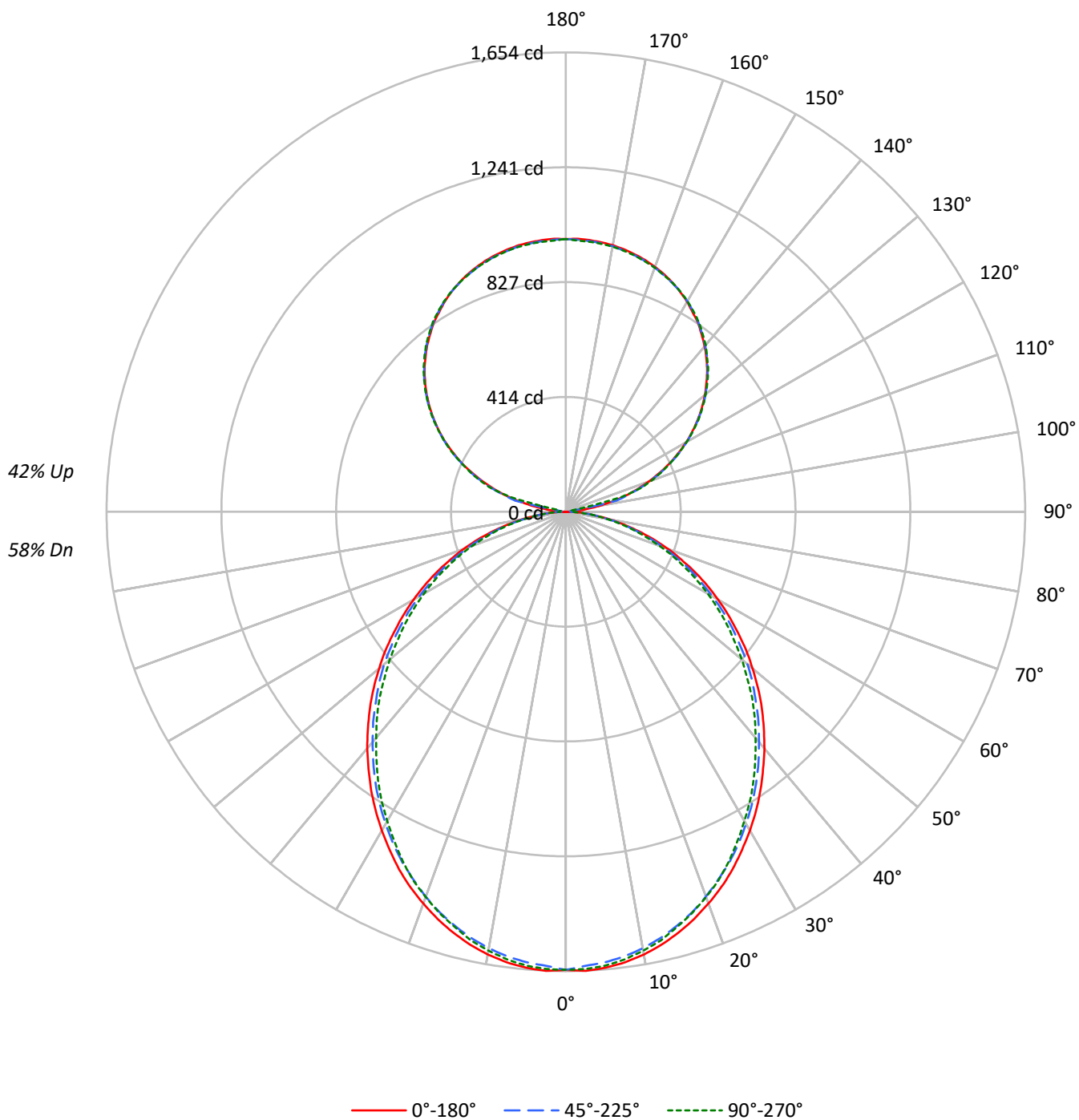
Lumens per Lamp: N/A
Luminaire Lumens: 7273.0 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 67.9
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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	64	64	64
1	100	95	91	88	93	89	85	82	77	75	72	66	64	63	56	55	54
2	91	83	77	72	84	78	72	68	68	63	60	58	55	52	49	47	45
3	83	73	66	60	77	68	62	56	60	54	50	51	48	44	44	41	38
4	76	65	57	51	70	61	53	48	53	47	43	46	41	38	39	36	33
5	70	58	49	43	65	54	47	41	47	42	37	41	37	33	35	32	29
6	64	52	44	38	60	49	41	36	43	37	32	37	33	29	32	28	25
7	59	47	39	33	55	44	37	32	39	33	29	34	29	26	29	26	23
8	55	43	35	29	51	40	33	28	35	30	25	31	26	23	27	23	20
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	18
10	48	36	28	24	45	34	27	23	30	24	21	26	22	19	23	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13448	13448	13448
5°	13460	13062	13078
10°	13345	12698	12610
15°	13154	12268	12082
20°	12910	11802	11537
25°	12635	11309	10949
30°	12302	10776	10304
35°	11959	10230	9681
40°	11601	9644	9017
45°	11225	9055	8397
50°	10810	8485	7710
55°	10358	7818	7028
60°	9895	7088	6318
65°	9365	6335	5518
70°	8757	5427	4659
75°	7844	4374	3732
80°	6683	3162	2626
85°	5196	1760	1413

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11225 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.4	2.1
10°-20°	437.9	6.0
20°-30°	644.5	8.9
30°-40°	749.2	10.3
40°-50°	749.1	10.3
50°-60°	655.2	9.0
60°-70°	486.5	6.7
70°-80°	276.0	3.8
80°-90°	81.1	1.1
90°-100°	32.6	0.4
100°-110°	214.6	3.0
110°-120°	409.8	5.6
120°-130°	520.3	7.2
130°-140°	556.6	7.7
140°-150°	520.4	7.2
150°-160°	419.7	5.8
160°-170°	270.7	3.7
170°-180°	93.3	1.3
0°-30°	1237.9	17.0
0°-40°	1987.1	27.3
0°-60°	3391.5	46.6
0°-90°	4235.0	58.2
90°-120°	657.0	9.0
90°-150°	2254.3	31.0
90°-180°	3038.0	41.8
0°-180°	7273.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1649	1649	1649	1649	1649	
5°	1648	1643	1628	1643	1640	156
15°	1569	1563	1544	1551	1547	442
25°	1421	1411	1393	1394	1389	654
35°	1222	1213	1195	1185	1179	764
45°	998	988	967	953	949	769
55°	755	751	732	716	708	676
65°	511	505	492	478	472	506
75°	272	266	259	254	252	289
85°	71	71	69	69	67	77
90°	2	10	16	21	22	7
95°	40	15	16	21	21	50
105°	221	225	229	236	209	231
115°	413	415	414	416	416	406
125°	580	583	582	584	584	518
135°	720	719	722	723	725	554
145°	830	832	832	833	834	518
155°	910	911	908	911	909	420
165°	960	956	956	962	955	271
175°	982	977	978	985	976	93
180°	982	982	982	982	982	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1649.2	1649.2	1649.2	1649.2	1649.2
2.5°	1654.5	1650.5	1636.0	1649.2	1647.9
5°	1647.9	1642.6	1628.1	1642.6	1640.0
7.5°	1636.0	1630.7	1614.8	1626.7	1625.4
10°	1618.8	1613.5	1596.3	1606.9	1604.3
12.5°	1596.3	1591.1	1572.6	1584.5	1580.5
15°	1568.6	1563.3	1543.5	1551.4	1547.4
17.5°	1536.9	1530.3	1511.8	1517.1	1514.4
20°	1501.2	1494.6	1474.8	1478.7	1476.1
22.5°	1462.9	1453.6	1433.8	1441.7	1436.4
25°	1420.6	1411.3	1392.8	1394.2	1388.9
27.5°	1373.0	1363.8	1346.6	1343.9	1337.3
30°	1325.4	1314.9	1297.7	1292.4	1285.8
32.5°	1275.2	1266.0	1247.5	1240.9	1234.3
35°	1222.4	1213.1	1194.6	1185.4	1178.8
37.5°	1166.9	1158.9	1139.1	1129.9	1120.6
40°	1112.7	1102.1	1082.3	1069.1	1062.5
42.5°	1054.5	1049.3	1026.8	1010.9	1007.0
45°	997.7	988.5	967.3	952.8	948.8
47.5°	938.2	931.6	911.8	896.0	885.4
50°	877.5	872.2	853.7	835.2	827.2
52.5°	818.0	811.4	791.6	775.7	765.1
55°	754.6	750.6	732.1	716.2	708.3
57.5°	695.1	691.1	672.6	656.8	648.8
60°	633.0	626.4	609.2	597.3	590.7
62.5°	572.2	566.9	548.4	537.8	531.2
65°	511.4	504.8	491.6	478.4	471.8
67.5°	449.3	444.0	430.8	417.6	416.3
70°	392.5	383.2	372.7	362.1	358.1
72.5°	331.7	322.4	314.5	306.6	302.6
75°	272.2	265.6	259.0	253.7	252.4
77.5°	214.1	211.4	204.8	203.5	199.5
80°	162.5	158.6	155.9	153.3	152.0
82.5°	112.3	111.0	111.0	109.7	108.4
85°	71.4	71.4	68.7	68.7	67.4
87.5°	34.4	33.0	31.7	31.7	31.7
90°	2.2	10.3	16.2	20.6	22.0
92.5°	11.0	9.5	15.4	19.8	19.8
95°	40.4	15.4	16.2	20.6	21.3
97.5°	77.1	93.3	16.2	19.8	20.6
100°	120.4	133.6	32.3	19.8	20.6
102.5°	168.9	177.7	186.5	21.3	21.3
105°	221.0	225.4	229.1	235.7	209.3
107.5°	268.8	271.0	276.1	279.8	282.7
110°	317.2	319.4	323.8	325.3	327.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	364.2	368.6	370.1	369.4	372.3
115°	412.7	414.9	414.2	415.6	415.6
117.5°	456.0	458.9	461.2	460.4	460.4
120°	500.1	503.0	502.3	503.7	502.3
122.5°	541.2	542.7	544.1	544.9	543.4
125°	580.1	583.0	581.6	583.8	584.5
127.5°	617.6	618.3	622.0	621.2	620.5
130°	653.5	654.3	656.5	657.2	657.2
132.5°	686.6	688.1	691.0	691.7	691.0
135°	719.6	718.9	721.8	723.3	724.8
137.5°	749.0	749.0	752.7	754.1	753.4
140°	777.6	779.1	780.6	782.8	783.5
142.5°	803.3	806.3	807.0	808.5	808.5
145°	829.8	832.0	832.0	832.7	834.2
147.5°	850.3	854.7	854.0	854.7	855.5
150°	873.1	876.0	875.3	875.3	876.0
152.5°	892.2	894.4	892.9	894.4	893.7
155°	909.8	910.6	908.3	911.3	909.1
157.5°	925.2	925.2	922.3	926.0	922.3
160°	938.5	936.3	935.5	939.9	935.5
162.5°	950.2	947.3	946.5	950.9	945.8
165°	959.8	956.1	956.1	962.0	955.3
167.5°	967.8	964.2	963.4	970.0	962.7
170°	974.4	970.0	970.8	976.6	969.3
172.5°	978.8	974.4	975.2	981.0	973.0
175°	981.8	977.4	978.1	984.7	975.9
177.5°	984.0	978.8	980.3	986.2	977.4
180°	981.8	981.8	981.8	981.8	981.8

(END OF REPORT)