

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: P1000784

Luminaire Tested: SA4XXDIP-B1020D810UB35-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000784
REPORT IS A COMBINATION OF REPORTS P995397 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1020D810UB35-4F0-XX-W2A-D4
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

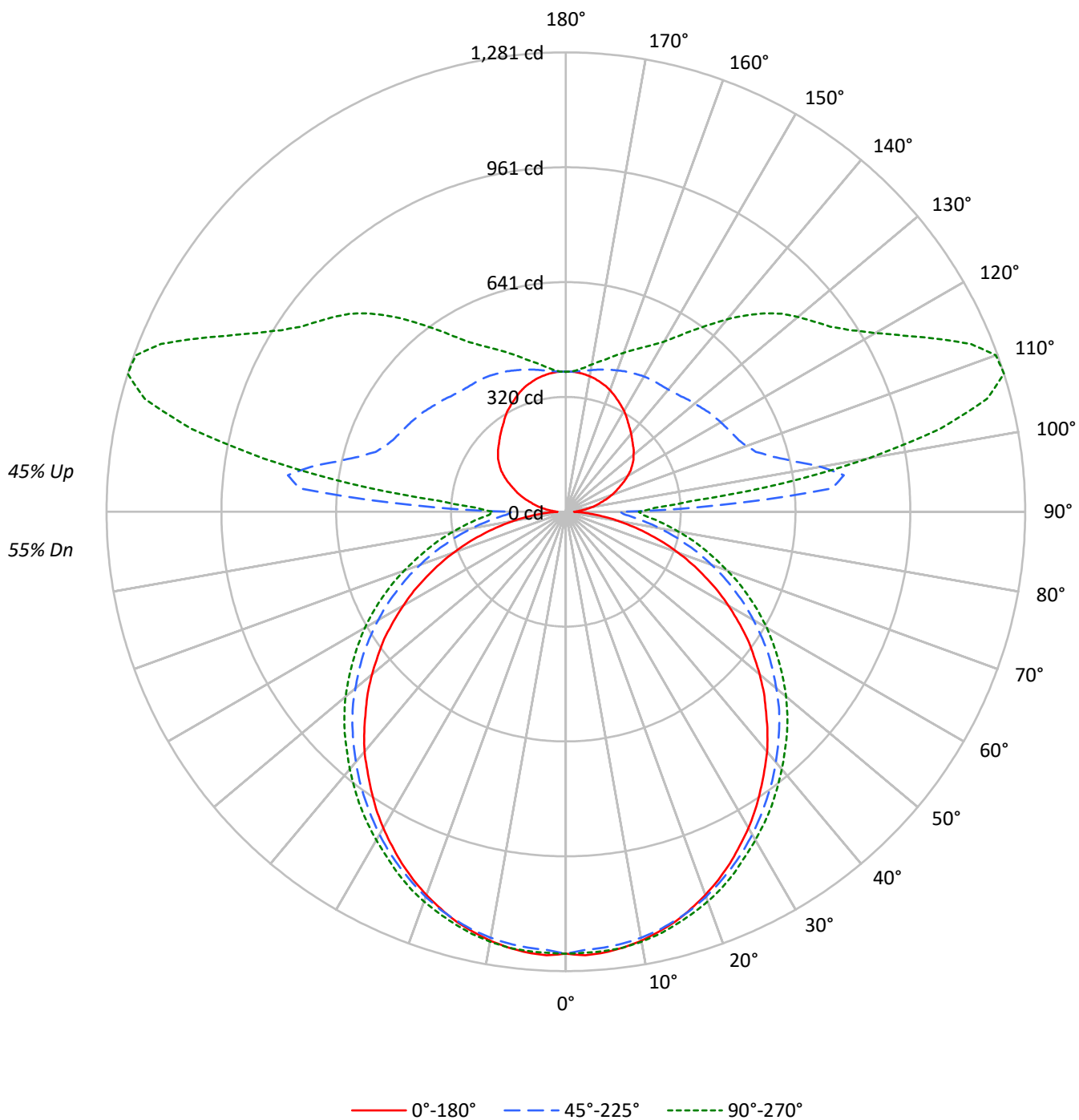
Lumens per Lamp: N/A
Luminaire Lumens: 7052.7 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61
1	98	93	89	85	91	86	83	79	74	71	69	63	60	59	52	51	49
2	89	81	74	68	82	75	69	64	64	60	56	54	51	48	45	43	41
3	81	70	63	56	74	65	59	53	56	51	46	48	43	40	40	37	34
4	74	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29
5	67	55	47	40	62	51	44	38	44	38	34	38	33	29	32	28	25
6	62	49	41	35	57	46	38	33	40	34	29	34	29	25	28	25	22
7	57	45	36	30	53	42	34	29	36	30	26	31	26	22	26	22	19
8	53	40	32	27	49	38	30	25	33	27	23	28	23	20	24	20	17
9	49	37	29	24	46	34	27	23	30	24	20	26	21	18	22	18	15
10	46	34	26	21	43	32	25	20	28	22	18	24	19	16	20	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10050	10050	10050
5°	10078	9788	9806
10°	10012	9595	9568
15°	9919	9379	9300
20°	9779	9145	9040
25°	9623	8887	8759
30°	9454	8630	8472
35°	9263	8368	8217
40°	9108	8117	7953
45°	8881	7881	7720
50°	8689	7613	7474
55°	8487	7355	7190
60°	8177	7033	6923
65°	7834	6686	6602
70°	7420	6291	6231
75°	6841	5850	5877
80°	6186	5403	5507
85°	5319	4951	5207

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 8881 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.8	1.7
10°-20°	334.6	4.7
20°-30°	505.9	7.2
30°-40°	612.0	8.7
40°-50°	647.0	9.2
50°-60°	608.9	8.6
60°-70°	505.3	7.2
70°-80°	354.6	5.0
80°-90°	201.4	2.9
90°-100°	409.0	5.8
100°-110°	678.0	9.6
110°-120°	584.9	8.3
120°-130°	474.9	6.7
130°-140°	382.9	5.4
140°-150°	284.3	4.0
150°-160°	197.8	2.8
160°-170°	116.4	1.6
170°-180°	37.8	0.5
0°-30°	957.3	13.6
0°-40°	1569.3	22.3
0°-60°	2825.3	40.1
0°-90°	3886.6	55.1
90°-120°	1671.9	23.7
90°-150°	2814.1	39.9
90°-180°	3166.0	44.9
0°-180°	7052.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1232	1232	1232	1232	1232	
5°	1234	1230	1220	1231	1230	117
15°	1183	1184	1180	1192	1191	333
25°	1082	1090	1094	1110	1111	498
35°	947	963	977	996	1001	593
45°	789	816	842	865	872	610
55°	618	647	689	716	725	551
65°	428	472	519	553	564	424
75°	237	288	346	385	398	252
85°	73	131	193	235	248	76
90°	23	83	150	192	204	17
95°	43	143	745	467	357	42
105°	102	170	594	1209	1216	110
115°	166	219	514	957	1141	165
125°	226	266	485	799	900	201
135°	264	314	455	686	782	205
145°	303	345	440	557	617	190
155°	343	370	428	485	506	158
165°	374	385	410	434	441	106
175°	390	390	394	399	397	37
180°	390	390	390	390	390	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1232.5	1232.5	1232.5	1232.5	1232.5
2.5°	1238.0	1233.9	1222.8	1232.5	1231.1
5°	1233.9	1229.7	1220.0	1231.1	1229.7
7.5°	1225.6	1222.8	1214.5	1227.0	1225.6
10°	1214.5	1213.1	1206.2	1218.7	1217.3
12.5°	1199.3	1199.3	1195.2	1206.2	1206.2
15°	1182.8	1184.2	1180.0	1192.4	1191.1
17.5°	1160.7	1164.8	1163.5	1175.9	1174.5
20°	1137.2	1141.4	1142.8	1156.6	1156.6
22.5°	1111.0	1116.5	1119.3	1133.1	1135.9
25°	1082.0	1090.3	1094.5	1109.6	1111.0
27.5°	1050.3	1062.7	1068.2	1082.0	1083.4
30°	1018.5	1029.6	1039.3	1054.4	1057.2
32.5°	984.0	997.8	1008.9	1026.8	1029.6
35°	946.8	963.3	977.1	996.5	1000.6
37.5°	909.5	928.8	945.4	964.7	968.9
40°	873.6	891.6	910.9	931.6	937.1
42.5°	832.2	852.9	876.4	899.9	904.0
45°	789.4	815.7	841.9	865.4	872.3
47.5°	749.4	775.6	806.0	829.5	837.7
50°	705.3	735.6	766.0	793.6	801.9
52.5°	661.1	691.5	727.3	754.9	763.2
55°	618.3	647.3	688.7	716.3	724.6
57.5°	570.0	605.9	645.9	679.0	685.9
60°	523.1	559.0	604.5	636.2	647.3
62.5°	477.5	517.6	563.1	594.8	605.9
65°	427.8	472.0	518.9	553.4	564.5
67.5°	380.9	427.8	477.5	512.0	523.1
70°	332.6	379.5	432.0	469.2	478.9
72.5°	285.7	334.0	390.6	426.5	437.5
75°	237.4	288.5	346.4	385.1	397.5
77.5°	191.8	245.7	306.4	345.0	358.8
80°	150.4	205.6	266.4	307.8	318.8
82.5°	109.0	167.0	227.7	270.5	282.9
85°	73.1	131.1	193.2	234.6	248.4
87.5°	45.5	102.1	162.9	202.9	215.3
90°	22.9	83.4	150.4	192.0	203.8
92.5°	31.4	128.0	429.1	266.3	247.8
95°	43.2	143.3	745.2	466.8	357.0
97.5°	58.8	144.8	782.0	781.2	611.0
100°	73.5	150.8	721.6	1016.6	855.2
102.5°	88.8	159.0	649.5	1160.2	1069.2
105°	102.1	170.0	594.3	1209.0	1215.8
107.5°	119.8	182.8	555.9	1184.9	1281.2
110°	136.0	194.2	535.8	1115.2	1275.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	151.6	206.8	522.0	1031.7	1222.3
115°	166.3	219.0	513.6	957.3	1141.1
117.5°	183.2	231.4	505.9	896.1	1062.9
120°	198.7	241.8	499.0	852.2	996.3
122.5°	214.0	253.5	491.4	822.0	942.0
125°	225.6	265.7	485.0	798.6	899.9
127.5°	237.9	279.5	476.6	774.6	871.6
130°	246.5	291.6	468.9	748.8	845.0
132.5°	256.4	303.0	462.6	719.7	817.3
135°	264.4	314.2	455.0	685.7	782.2
137.5°	273.6	322.4	449.5	651.2	742.5
140°	283.5	331.2	444.6	617.4	701.0
142.5°	292.9	339.2	441.8	587.0	657.3
145°	302.8	345.2	440.3	557.4	617.4
147.5°	314.3	352.0	438.0	531.8	579.9
150°	325.1	358.6	435.7	513.1	547.6
152.5°	333.7	364.7	431.8	498.6	524.6
155°	342.9	370.0	428.0	484.8	505.5
157.5°	352.1	375.1	424.2	471.8	487.8
160°	360.5	379.3	419.6	458.6	471.7
162.5°	368.2	382.8	415.0	446.0	456.4
165°	373.5	385.0	410.4	434.5	441.0
167.5°	379.7	387.0	405.8	424.6	428.8
170°	383.5	388.5	401.1	414.6	417.3
172.5°	387.3	389.6	396.5	405.8	405.8
175°	389.6	390.4	393.5	398.8	397.3
177.5°	391.2	390.4	391.2	393.8	391.2
180°	390.4	390.4	390.4	390.4	390.4

(END OF REPORT)