

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: P1000773

Luminaire Tested: SA4XXDIP-B1020D810UB30-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000773
REPORT IS A COMBINATION OF REPORTS P995386 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1020D810UB30-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

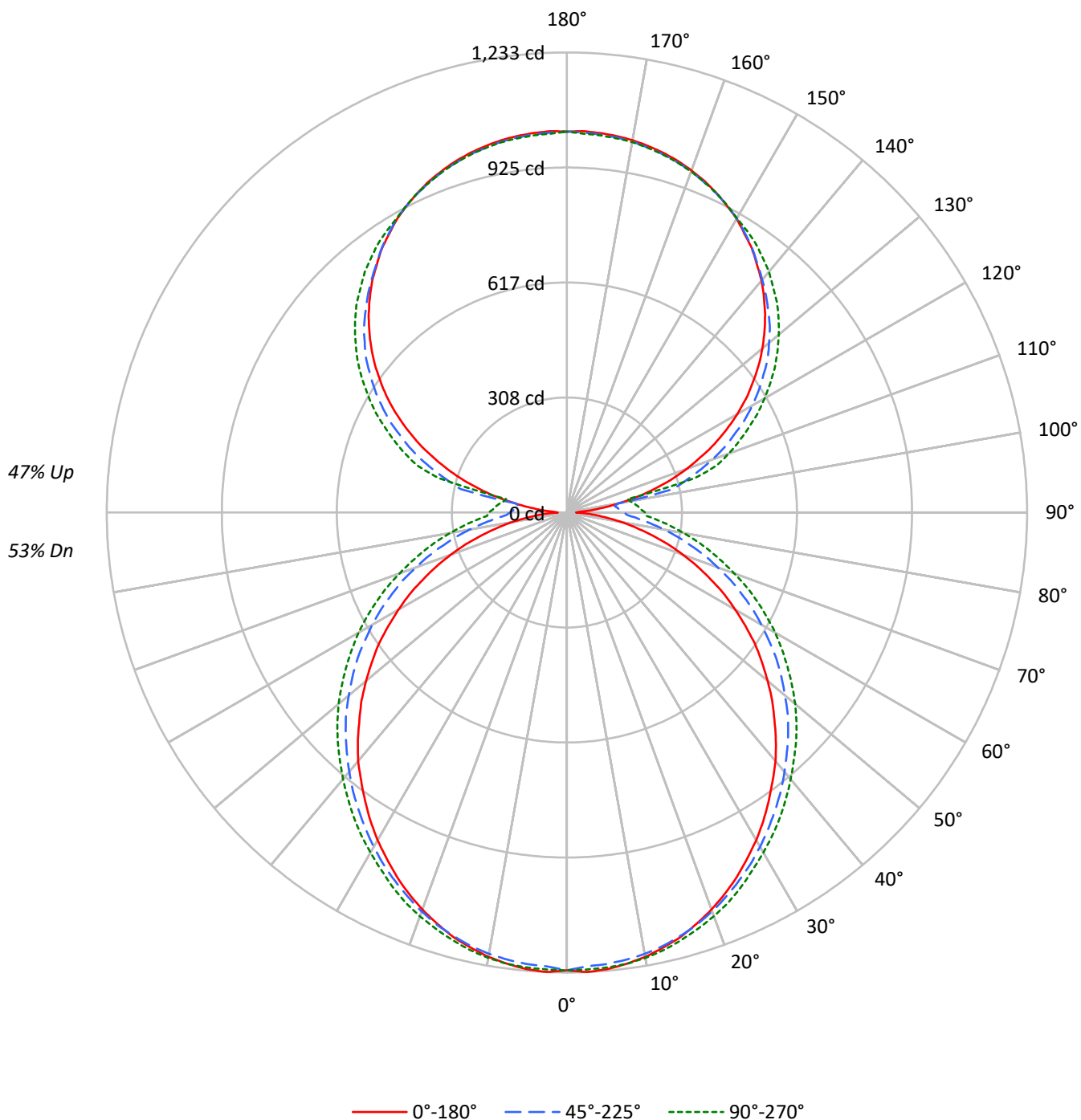
Lumens per Lamp: N/A
Luminaire Lumens: 7345.0 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	100	100	100	100	85	85	85	71	71	71	59	59	59
1	97	93	88	84	90	86	82	79	73	70	67	61	59	57	50	49	47
2	88	80	74	68	81	74	68	64	63	59	55	53	50	47	43	41	39
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	33
4	73	62	53	47	67	57	50	44	49	43	39	41	37	33	34	31	28
5	67	55	46	40	62	51	43	38	44	38	33	37	32	29	30	27	24
6	62	49	41	35	57	46	38	33	39	33	29	33	28	25	27	24	21
7	57	44	36	30	52	41	34	29	35	30	25	30	25	22	25	21	19
8	53	40	32	27	49	37	30	25	32	26	22	27	23	19	23	19	17
9	49	37	29	24	45	34	27	22	30	24	20	25	21	17	21	18	15
10	46	34	26	21	42	31	25	20	27	22	18	23	19	16	20	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10007	10007	10007
5°	10035	9746	9764
10°	9969	9555	9527
15°	9876	9339	9260
20°	9738	9106	9001
25°	9582	8848	8722
30°	9414	8593	8436
35°	9223	8333	8182
40°	9070	8082	7919
45°	8844	7847	7686
50°	8650	7580	7441
55°	8452	7323	7159
60°	8141	7003	6893
65°	7801	6658	6574
70°	7389	6263	6205
75°	6813	5825	5852
80°	6161	5378	5483
85°	5298	4930	5186

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8844 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.3	1.6
10°-20°	333.2	4.5
20°-30°	503.7	6.9
30°-40°	609.4	8.3
40°-50°	644.3	8.8
50°-60°	606.3	8.3
60°-70°	503.1	6.9
70°-80°	353.1	4.8
80°-90°	201.2	2.7
90°-100°	152.4	2.1
100°-110°	310.9	4.2
110°-120°	485.0	6.6
120°-130°	574.1	7.8
130°-140°	593.1	8.1
140°-150°	544.0	7.4
150°-160°	436.4	5.9
160°-170°	281.4	3.8
170°-180°	97.0	1.3
0°-30°	953.2	13.0
0°-40°	1562.6	21.3
0°-60°	2813.2	38.3
0°-90°	3870.6	52.7
90°-120°	948.3	12.9
90°-150°	2659.5	36.2
90°-180°	3474.0	47.3
0°-180°	7345.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1227	1227	1227	1227	1227	
5°	1229	1224	1215	1226	1224	117
15°	1178	1179	1175	1187	1186	332
25°	1077	1086	1090	1105	1106	496
35°	943	959	973	992	996	590
45°	786	812	838	862	868	608
55°	616	644	686	713	722	549
65°	426	470	517	551	562	422
75°	236	287	345	383	396	251
85°	73	131	192	234	247	76
90°	24	88	153	197	210	17
95°	60	79	136	178	191	66
105°	242	274	329	370	354	255
115°	437	452	495	527	537	431
125°	609	610	643	672	681	544
135°	751	750	763	786	796	579
145°	864	865	865	874	881	540
155°	946	947	944	948	945	436
165°	998	994	994	1000	993	282
175°	1021	1016	1017	1024	1015	97
180°	1021	1021	1021	1021	1021	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1227.2	1227.2	1227.2	1227.2	1227.2
2.5°	1232.7	1228.6	1217.6	1227.2	1225.8
5°	1228.6	1224.4	1214.8	1225.8	1224.4
7.5°	1220.3	1217.6	1209.3	1221.7	1220.3
10°	1209.3	1208.0	1201.1	1213.4	1212.1
12.5°	1194.2	1194.2	1190.1	1201.1	1201.1
15°	1177.7	1179.1	1175.0	1187.3	1186.0
17.5°	1155.7	1159.9	1158.5	1170.8	1169.5
20°	1132.4	1136.5	1137.9	1151.6	1151.6
22.5°	1106.3	1111.8	1114.5	1128.2	1131.0
25°	1077.4	1085.6	1089.8	1104.9	1106.3
27.5°	1045.8	1058.2	1063.7	1077.4	1078.8
30°	1014.2	1025.2	1034.8	1049.9	1052.7
32.5°	979.8	993.6	1004.6	1022.4	1025.2
35°	942.7	959.2	973.0	992.2	996.3
37.5°	905.6	924.9	941.4	960.6	964.7
40°	869.9	887.8	907.0	927.6	933.1
42.5°	828.7	849.3	872.6	896.0	900.1
45°	786.1	812.2	838.3	861.6	868.5
47.5°	746.2	772.3	802.6	825.9	834.2
50°	702.2	732.5	762.7	790.2	798.4
52.5°	658.3	688.5	724.2	751.7	760.0
55°	615.7	644.5	685.7	713.2	721.5
57.5°	567.6	603.3	643.1	676.1	683.0
60°	520.8	556.6	601.9	633.5	644.5
62.5°	475.5	515.3	560.7	592.3	603.3
65°	426.0	470.0	516.7	551.1	562.1
67.5°	379.3	426.0	475.5	509.8	520.8
70°	331.2	377.9	430.1	467.2	476.9
72.5°	284.5	332.6	388.9	424.6	435.6
75°	236.4	287.2	344.9	383.4	395.8
77.5°	191.0	244.6	305.1	343.6	357.3
80°	149.8	204.8	265.2	306.5	317.4
82.5°	108.6	166.3	226.7	269.4	281.7
85°	72.8	130.6	192.4	233.6	247.4
87.5°	45.3	101.7	162.2	202.0	214.4
90°	24.3	87.7	152.8	197.3	209.8
92.5°	32.1	78.6	143.8	186.9	197.9
95°	59.9	79.2	136.4	178.1	191.1
97.5°	96.7	153.3	129.5	169.0	182.2
100°	140.3	189.8	138.0	162.1	172.6
102.5°	190.7	230.1	291.5	155.4	166.4
105°	242.2	274.3	328.9	370.2	353.6
107.5°	291.9	317.4	370.9	409.1	421.8
110°	340.9	362.3	415.0	448.1	461.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	388.3	409.4	456.3	485.8	499.8
115°	437.3	452.0	495.2	527.0	536.6
117.5°	482.4	493.7	537.2	565.3	576.3
120°	526.9	534.0	573.1	602.1	611.6
122.5°	569.6	571.2	609.8	638.0	646.1
125°	608.7	610.4	643.2	671.6	680.6
127.5°	647.6	647.0	678.3	702.3	711.2
130°	683.7	683.0	707.3	732.9	741.1
132.5°	718.0	718.1	737.7	761.9	769.3
135°	751.0	750.2	763.0	786.5	796.2
137.5°	781.5	780.2	789.5	811.7	817.8
140°	811.3	811.5	814.3	834.5	842.2
142.5°	836.7	839.8	839.1	855.8	861.3
145°	864.2	865.1	865.1	874.1	881.1
147.5°	885.6	888.8	888.0	890.2	896.4
150°	909.3	910.9	910.1	910.1	910.9
152.5°	927.7	930.0	928.5	930.0	929.2
155°	946.0	946.8	944.5	947.6	945.3
157.5°	962.1	962.1	959.0	962.8	959.0
160°	975.8	973.5	972.8	977.3	972.8
162.5°	988.0	985.0	984.2	988.8	983.4
165°	998.0	994.1	994.1	1000.2	993.4
167.5°	1006.3	1002.5	1001.8	1008.6	1001.0
170°	1013.2	1008.6	1009.4	1015.5	1007.9
172.5°	1017.8	1013.2	1014.0	1020.1	1011.7
175°	1020.9	1016.3	1017.0	1023.9	1014.7
177.5°	1023.1	1017.8	1019.3	1025.4	1016.3
180°	1020.9	1020.9	1020.9	1020.9	1020.9

(END OF REPORT)