

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: P1000782

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000782
REPORT IS A COMBINATION OF REPORTS P995395 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-D
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

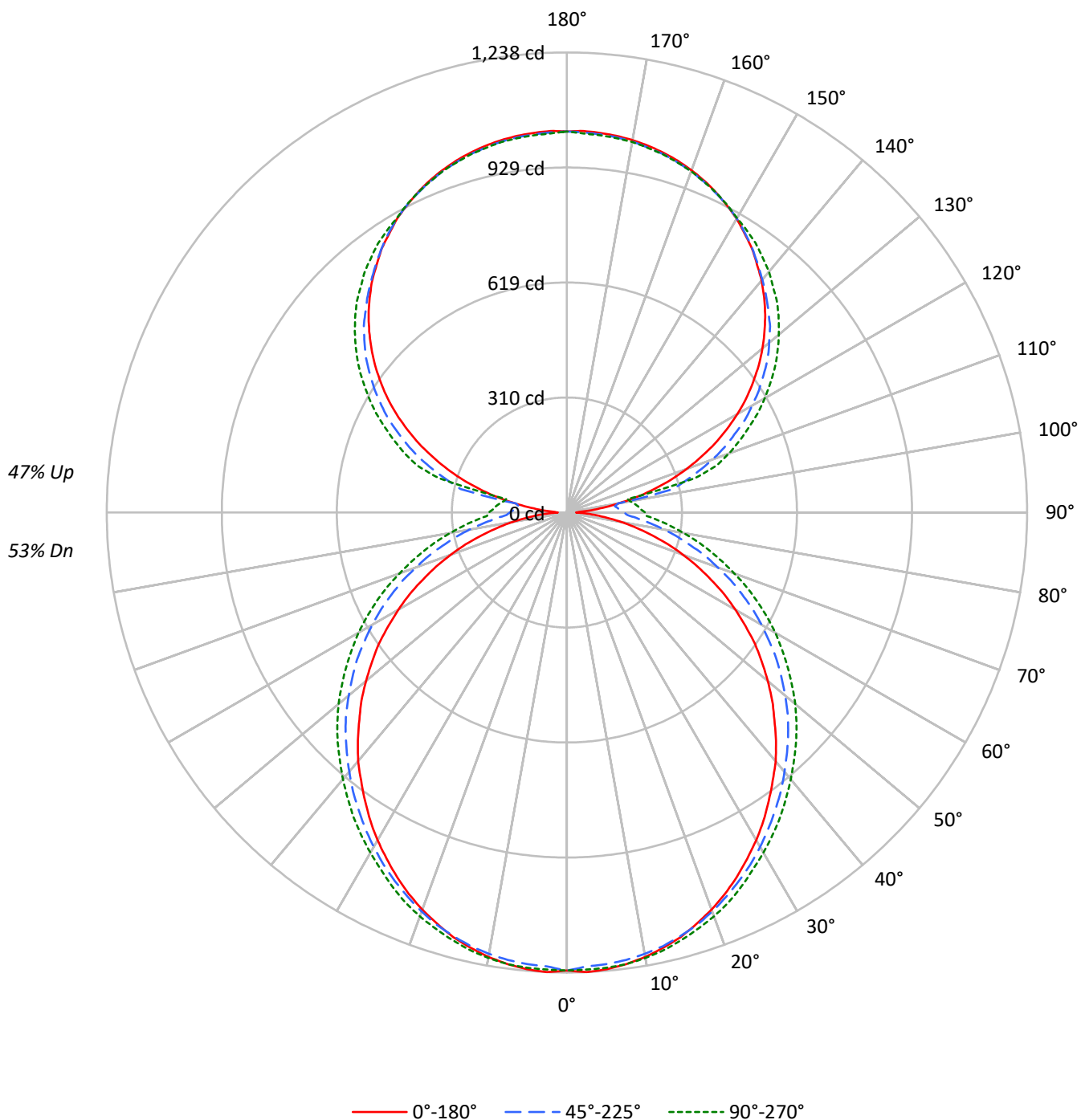
Lumens per Lamp: N/A
Luminaire Lumens: 7377.0 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	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	1.6
10°-20°	334.6	4.5
20°-30°	505.9	6.9
30°-40°	612.0	8.3
40°-50°	647.0	8.8
50°-60°	608.9	8.3
60°-70°	505.3	6.8
70°-80°	354.6	4.8
80°-90°	202.0	2.7
90°-100°	153.1	2.1
100°-110°	312.3	4.2
110°-120°	487.2	6.6
120°-130°	576.7	7.8
130°-140°	595.7	8.1
140°-150°	546.4	7.4
150°-160°	438.3	5.9
160°-170°	282.7	3.8
170°-180°	97.4	1.3
0°-30°	957.3	13.0
0°-40°	1569.3	21.3
0°-60°	2825.3	38.3
0°-90°	3887.2	52.7
90°-120°	952.5	12.9
90°-150°	2671.3	36.2
90°-180°	3490.0	47.3
0°-180°	7377.0	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°	24	88	154	198	211	17
95°	60	80	137	179	192	66
105°	243	275	330	372	355	256
115°	439	454	497	529	539	433
125°	611	613	646	675	684	546
135°	754	754	766	790	800	582
145°	868	869	869	878	885	543
155°	950	951	949	952	950	438
165°	1002	998	998	1005	998	283
175°	1025	1021	1022	1028	1019	98
180°	1025	1025	1025	1025	1025	

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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°	24.4	88.0	153.5	198.2	210.7
92.5°	32.2	79.0	144.5	187.7	198.7
95°	60.1	79.6	137.0	178.8	192.0
97.5°	97.1	154.0	130.1	169.8	183.0
100°	141.0	190.7	138.6	162.9	173.3
102.5°	191.6	231.1	292.8	156.1	167.1
105°	243.2	275.4	330.4	371.8	355.2
107.5°	293.1	318.9	372.6	410.9	423.7
110°	342.3	364.0	416.9	450.1	463.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	390.1	411.2	458.3	487.9	502.0
115°	439.3	454.0	497.4	529.3	539.0
117.5°	484.6	495.9	539.6	567.8	578.9
120°	529.2	536.3	575.7	604.8	614.3
122.5°	572.1	573.7	612.5	640.9	648.9
125°	611.4	613.0	646.0	674.6	683.6
127.5°	650.5	649.9	681.3	705.4	714.3
130°	686.7	686.1	710.4	736.1	744.4
132.5°	721.2	721.4	741.0	765.2	772.8
135°	754.4	753.6	766.3	789.9	799.8
137.5°	785.1	783.7	793.0	815.2	821.4
140°	815.0	815.1	818.0	838.2	845.9
142.5°	840.4	843.5	842.9	859.6	865.1
145°	868.0	868.9	868.9	878.0	885.0
147.5°	889.5	892.7	891.9	894.1	900.4
150°	913.3	914.9	914.2	914.2	914.9
152.5°	931.8	934.1	932.6	934.1	933.3
155°	950.2	951.0	948.7	951.8	949.5
157.5°	966.3	966.3	963.3	967.1	963.3
160°	980.1	977.8	977.1	981.7	977.1
162.5°	992.4	989.3	988.6	993.2	987.8
165°	1002.4	998.5	998.5	1004.7	997.8
167.5°	1010.8	1007.0	1006.2	1013.1	1005.4
170°	1017.7	1013.1	1013.9	1020.0	1012.3
172.5°	1022.3	1017.7	1018.5	1024.6	1016.2
175°	1025.4	1020.8	1021.5	1028.4	1019.2
177.5°	1027.7	1022.3	1023.8	1030.0	1020.8
180°	1025.4	1025.4	1025.4	1025.4	1025.4

(END OF REPORT)