

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: P1000801

Luminaire Tested: SA4XXDIP-B1020D810UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000801
REPORT IS A COMBINATION OF REPORTS P995414 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-D1
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

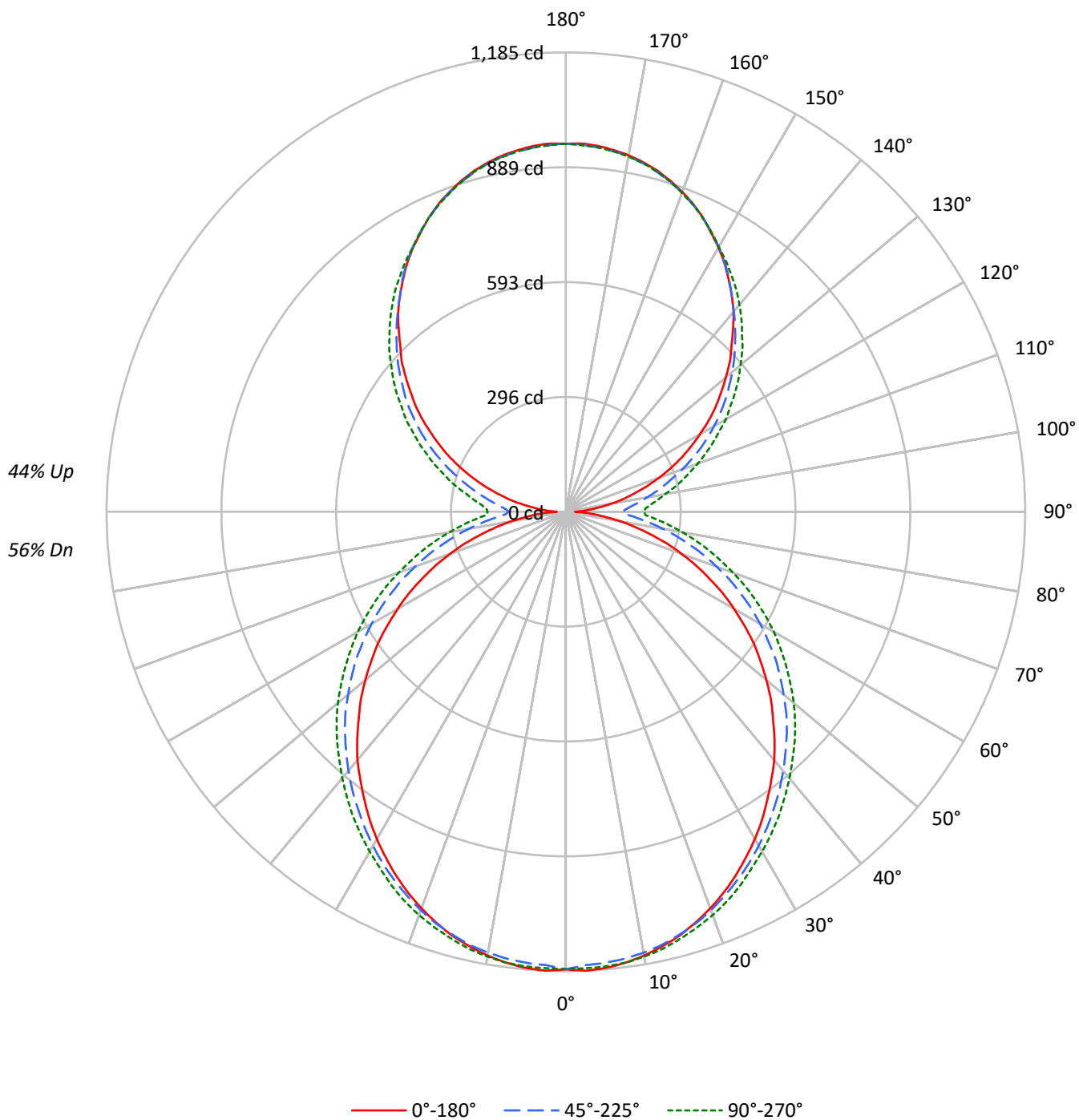
Lumens per Lamp: N/A
Luminaire Lumens: 6659.0 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	98	93	89	85	91	87	83	79	74	71	69	63	61	59	53	51	50
2	89	81	74	68	82	75	69	64	64	60	56	55	51	48	46	43	41
3	81	71	63	56	74	66	59	53	56	51	47	48	44	40	40	37	34
4	74	62	54	47	68	58	50	45	50	44	39	42	38	34	36	32	29
5	67	55	47	40	62	52	44	38	45	38	34	38	33	29	32	28	25
6	62	49	41	35	57	46	39	33	40	34	29	34	29	26	29	25	22
7	57	45	36	30	53	42	34	29	36	30	26	31	26	23	26	22	20
8	53	40	32	27	49	38	31	25	33	27	23	28	24	20	24	20	17
9	50	37	29	24	46	35	28	23	30	24	20	26	21	18	22	18	16
10	46	34	26	21	43	32	25	20	28	22	18	24	19	16	21	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9622	9622	9622
5°	9649	9371	9388
10°	9586	9187	9160
15°	9496	8980	8904
20°	9363	8755	8654
25°	9213	8507	8386
30°	9052	8262	8112
35°	8868	8012	7867
40°	8720	7771	7614
45°	8503	7545	7391
50°	8318	7289	7155
55°	8126	7042	6883
60°	7829	6734	6628
65°	7501	6402	6320
70°	7103	6023	5965
75°	6550	5602	5627
80°	5923	5172	5272
85°	5094	4741	4985

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8503 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.8	1.7
10°-20°	320.3	4.8
20°-30°	484.4	7.3
30°-40°	586.0	8.8
40°-50°	619.5	9.3
50°-60°	583.0	8.8
60°-70°	483.8	7.3
70°-80°	339.5	5.1
80°-90°	193.4	2.9
90°-100°	175.8	2.6
100°-110°	269.7	4.1
110°-120°	371.5	5.6
120°-130°	447.1	6.7
130°-140°	480.2	7.2
140°-150°	461.1	6.9
150°-160°	385.5	5.8
160°-170°	256.5	3.9
170°-180°	89.8	1.3
0°-30°	916.5	13.8
0°-40°	1502.5	22.6
0°-60°	2705.0	40.6
0°-90°	3721.7	55.9
90°-120°	817.0	12.3
90°-150°	2205.4	33.1
90°-180°	2937.0	44.1
0°-180°	6659.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1180	1180	1180	1180	1180	
5°	1181	1177	1168	1179	1177	112
15°	1132	1134	1130	1142	1140	319
25°	1036	1044	1048	1062	1064	477
35°	906	922	936	954	958	568
45°	756	781	806	828	835	584
55°	592	620	659	686	694	528
65°	410	452	497	530	540	406
75°	227	276	332	369	381	241
85°	70	126	185	225	238	73
90°	23	84	147	190	202	18
95°	61	112	171	209	220	61
105°	183	210	262	297	310	195
115°	328	340	381	409	418	324
125°	472	470	502	526	532	421
135°	604	608	618	637	643	468
145°	732	734	734	741	744	458
155°	837	837	836	839	836	385
165°	911	909	908	912	909	257
175°	948	944	943	949	943	90
180°	949	949	949	949	949	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1180.0	1180.0	1180.0	1180.0	1180.0
2.5°	1185.3	1181.3	1170.7	1180.0	1178.6
5°	1181.3	1177.3	1168.1	1178.6	1177.3
7.5°	1173.4	1170.7	1162.8	1174.7	1173.4
10°	1162.8	1161.5	1154.9	1166.8	1165.4
12.5°	1148.3	1148.3	1144.3	1154.9	1154.9
15°	1132.4	1133.7	1129.8	1141.7	1140.3
17.5°	1111.3	1115.2	1113.9	1125.8	1124.5
20°	1088.8	1092.8	1094.1	1107.3	1107.3
22.5°	1063.7	1069.0	1071.6	1084.8	1087.5
25°	1035.9	1043.9	1047.8	1062.4	1063.7
27.5°	1005.6	1017.4	1022.7	1035.9	1037.3
30°	975.2	985.7	995.0	1009.5	1012.2
32.5°	942.1	955.3	965.9	983.1	985.7
35°	906.4	922.3	935.5	954.0	958.0
37.5°	870.8	889.3	905.1	923.6	927.6
40°	836.4	853.6	872.1	891.9	897.2
42.5°	796.8	816.6	839.1	861.5	865.5
45°	755.8	780.9	806.0	828.5	835.1
47.5°	717.5	742.6	771.7	794.1	802.1
50°	675.2	704.3	733.4	759.8	767.7
52.5°	632.9	662.0	696.4	722.8	730.7
55°	592.0	619.7	659.4	685.8	693.7
57.5°	545.7	580.1	618.4	650.1	656.7
60°	500.8	535.1	578.8	609.1	619.7
62.5°	457.2	495.5	539.1	569.5	580.1
65°	409.6	451.9	496.8	529.9	540.4
67.5°	364.7	409.6	457.2	490.2	500.8
70°	318.4	363.4	413.6	449.3	458.5
72.5°	273.5	319.8	373.9	408.3	418.9
75°	227.3	276.2	331.7	368.7	380.6
77.5°	183.7	235.2	293.3	330.3	343.6
80°	144.0	196.9	255.0	294.7	305.2
82.5°	104.4	159.9	218.0	259.0	270.9
85°	70.0	125.5	185.0	224.6	237.8
87.5°	43.6	97.8	155.9	194.2	206.1
90°	23.3	84.3	147.0	189.7	201.7
92.5°	38.9	94.7	155.2	194.4	205.7
95°	61.3	111.5	170.8	208.6	220.5
97.5°	86.4	130.6	190.6	227.9	239.8
100°	117.3	154.6	212.7	249.9	259.1
102.5°	151.1	180.9	237.0	273.6	284.8
105°	183.0	210.1	261.9	297.1	309.9
107.5°	218.9	242.2	289.1	325.0	333.6
110°	254.4	274.3	319.8	348.7	361.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	291.1	307.0	349.2	378.3	388.9
115°	328.0	339.9	380.7	409.1	417.6
117.5°	364.0	372.0	410.8	436.3	444.7
120°	398.7	405.6	441.7	464.4	476.5
122.5°	436.1	436.8	471.8	496.0	501.6
125°	471.5	470.2	502.5	526.1	532.5
127.5°	504.5	505.5	530.4	552.7	561.2
130°	538.5	539.3	560.5	582.8	587.8
132.5°	574.5	574.5	589.7	610.7	617.9
135°	603.9	608.3	617.6	637.2	643.0
137.5°	638.4	639.3	646.1	663.7	671.0
140°	672.9	673.1	674.4	690.8	696.7
142.5°	703.2	704.7	702.6	717.1	722.4
145°	731.8	733.5	734.2	741.4	744.5
147.5°	761.2	763.6	762.8	763.4	768.0
150°	787.6	789.3	789.3	789.3	788.5
152.5°	811.3	812.7	813.5	815.7	813.5
155°	837.0	837.0	836.2	839.2	836.2
157.5°	859.0	857.5	857.5	859.7	857.5
160°	878.1	877.4	876.6	878.8	875.2
162.5°	895.7	893.5	892.8	897.2	893.5
165°	911.1	908.9	907.5	911.9	908.9
167.5°	923.6	920.7	920.7	925.1	920.7
170°	933.9	930.2	930.9	935.4	930.2
172.5°	941.2	938.3	938.3	943.4	938.3
175°	947.8	944.2	943.4	948.6	943.4
177.5°	950.8	947.1	947.1	952.2	946.4
180°	949.3	949.3	949.3	949.3	949.3

(END OF REPORT)