

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: P1000802

Luminaire Tested: SA4XXDIP-B1020D810UB50-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000802
REPORT IS A COMBINATION OF REPORTS P995415 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-D4
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

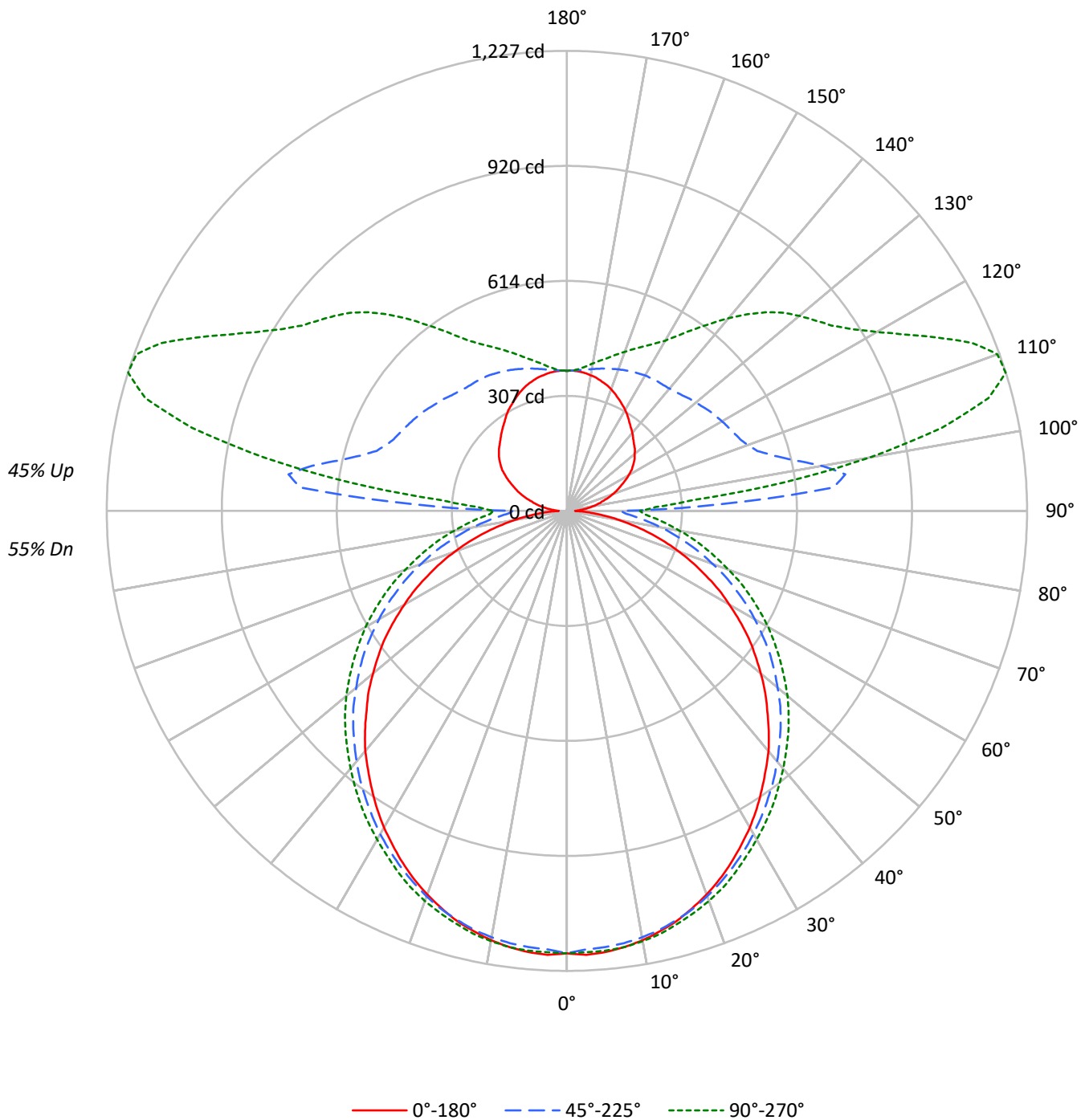
Lumens per Lamp: N/A
Luminaire Lumens: 6752.4 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	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	4.7
20°-30°	484.4	7.2
30°-40°	586.0	8.7
40°-50°	619.5	9.2
50°-60°	583.0	8.6
60°-70°	483.8	7.2
70°-80°	339.5	5.0
80°-90°	192.8	2.9
90°-100°	391.6	5.8
100°-110°	649.1	9.6
110°-120°	560.0	8.3
120°-130°	454.7	6.7
130°-140°	366.6	5.4
140°-150°	272.2	4.0
150°-160°	189.4	2.8
160°-170°	111.4	1.6
170°-180°	36.2	0.5
0°-30°	916.5	13.6
0°-40°	1502.5	22.3
0°-60°	2705.0	40.1
0°-90°	3721.1	55.1
90°-120°	1600.7	23.7
90°-150°	2694.3	39.9
90°-180°	3031.0	44.9
0°-180°	6752.4	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°	22	80	144	184	195	16
95°	41	137	714	447	342	40
105°	98	163	569	1158	1164	105
115°	159	210	492	917	1093	158
125°	216	254	464	765	862	193
135°	253	301	436	656	749	196
145°	290	330	422	534	591	182
155°	328	354	410	464	484	151
165°	358	369	393	416	422	101
175°	373	374	377	382	380	35
180°	374	374	374	374	374	

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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°	21.8	79.9	144.0	183.8	195.1
92.5°	30.1	122.6	410.8	255.0	237.3
95°	41.4	137.2	713.5	446.9	341.7
97.5°	56.3	138.6	748.8	747.8	585.0
100°	70.3	144.4	690.9	973.3	818.7
102.5°	85.0	152.3	621.8	1110.8	1023.6
105°	97.8	162.8	569.0	1157.6	1164.1
107.5°	114.7	175.0	532.3	1134.4	1226.7
110°	130.3	185.9	513.0	1067.8	1221.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	145.1	198.0	499.8	987.9	1170.3
115°	159.2	209.7	491.7	916.6	1092.6
117.5°	175.3	221.5	484.4	858.0	1017.7
120°	190.2	231.6	477.8	816.0	954.0
122.5°	204.9	242.7	470.5	787.0	902.0
125°	216.1	254.4	464.4	764.6	861.7
127.5°	227.8	267.6	456.3	741.6	834.5
130°	236.1	279.1	449.0	717.0	809.0
132.5°	245.6	290.1	443.0	689.1	782.6
135°	253.0	300.8	435.6	656.5	749.0
137.5°	261.8	308.7	430.3	623.5	710.8
140°	271.4	317.1	425.6	591.1	671.2
142.5°	280.4	324.8	423.0	562.0	629.3
145°	289.9	330.5	421.5	533.7	591.2
147.5°	300.9	337.0	419.3	509.2	555.2
150°	311.2	343.4	417.1	491.3	524.4
152.5°	319.5	349.2	413.5	477.4	502.3
155°	328.3	354.4	409.8	464.1	484.0
157.5°	337.1	359.1	406.1	451.6	467.1
160°	345.2	363.2	401.7	439.2	451.7
162.5°	352.5	366.4	397.3	427.0	437.0
165°	357.7	368.7	392.9	416.0	422.3
167.5°	363.5	370.5	388.5	406.5	410.5
170°	367.2	372.0	384.1	396.9	399.5
172.5°	370.9	373.0	379.7	388.5	388.5
175°	373.1	373.8	376.7	381.9	380.4
177.5°	374.5	373.8	374.5	377.1	374.5
180°	373.8	373.8	373.8	373.8	373.8

(END OF REPORT)