

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: P1000654

Luminaire Tested: SA4XXDIP-B1020D365UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000654
REPORT IS A COMBINATION OF REPORTS P995267 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1020D365UB30-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

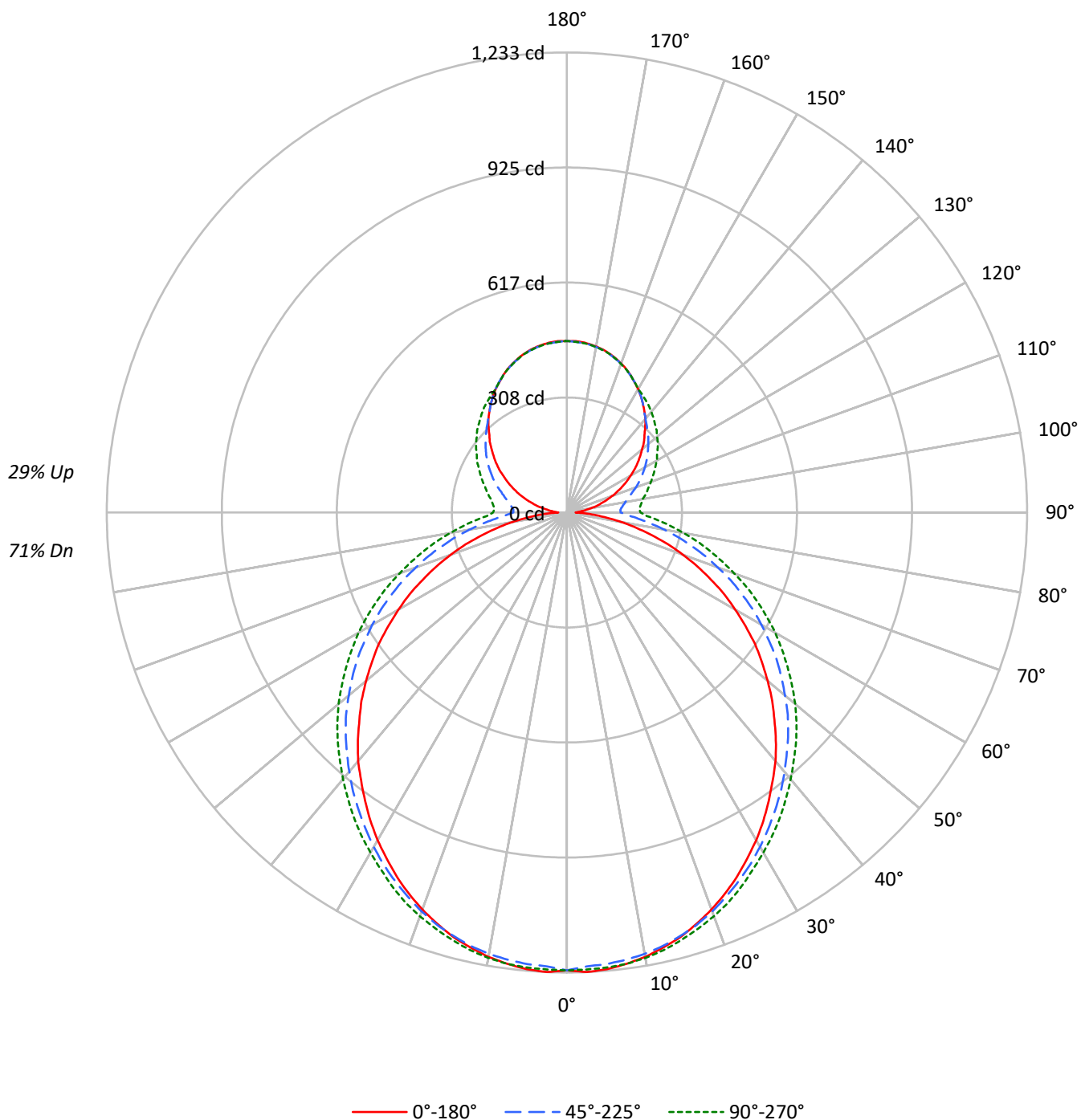
Lumens per Lamp: N/A
Luminaire Lumens: 5460.0 lumens
Efficiency: N/A
Efficacy: 97.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 56.1
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			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75	71		
1	101	96	91	87	95	91	87	83	81	78	75	72	70	68	64	63	61	57		
2	91	83	76	70	86	79	72	67	70	65	61	63	59	55	56	53	50	46		
3	83	72	64	58	78	69	61	55	62	56	51	55	50	46	49	45	42	39		
4	76	64	55	49	71	61	53	47	54	48	43	49	44	39	43	39	36	33		
5	70	57	48	41	65	54	46	40	49	42	37	44	38	34	39	34	31	28		
6	64	51	42	36	60	48	40	35	44	37	32	39	34	30	35	31	27	24		
7	59	46	37	31	56	44	36	30	40	33	28	36	30	26	32	27	24	21		
8	55	42	34	28	52	40	32	27	36	30	25	33	27	23	29	25	21	19		
9	51	38	30	25	48	36	29	24	33	27	22	30	25	21	27	23	19	17		
10	48	35	27	22	45	34	26	22	31	24	20	28	23	19	25	21	17	16		

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	2.1
10°-20°	333.2	6.1
20°-30°	503.7	9.2
30°-40°	609.4	11.2
40°-50°	644.3	11.8
50°-60°	606.3	11.1
60°-70°	503.1	9.2
70°-80°	353.1	6.5
80°-90°	200.0	3.7
90°-100°	148.5	2.7
100°-110°	177.5	3.3
110°-120°	211.3	3.9
120°-130°	234.2	4.3
130°-140°	240.1	4.4
140°-150°	224.7	4.1
150°-160°	186.6	3.4
160°-170°	124.2	2.3
170°-180°	43.5	0.8
0°-30°	953.2	17.5
0°-40°	1562.6	28.6
0°-60°	2813.2	51.5
0°-90°	3869.5	70.9
90°-120°	537.2	9.8
90°-150°	1236.2	22.6
90°-180°	1591.0	29.1
0°-180°	5460.0	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°	23	82	144	186	198	17
95°	39	88	147	185	197	37
105°	95	123	175	211	223	102
115°	163	176	219	249	258	162
125°	231	230	264	289	297	206
135°	294	296	306	327	334	228
145°	355	355	355	363	368	222
155°	405	405	405	406	405	187
165°	441	440	439	441	440	124
175°	459	457	457	459	457	44
180°	460	460	460	460	460	

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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°	23.1	82.0	143.8	185.9	197.6
92.5°	29.8	82.6	143.4	183.0	194.4
95°	39.2	87.7	146.6	184.8	197.1
97.5°	50.6	93.3	152.5	189.6	202.0
100°	64.9	102.0	158.8	196.6	206.3
102.5°	81.2	111.8	166.9	203.7	215.0
105°	95.2	123.1	175.3	210.8	222.7
107.5°	112.6	136.3	184.7	220.6	229.8
110°	129.0	148.9	196.6	227.5	239.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	146.1	162.6	207.3	237.5	248.5
115°	163.2	175.6	218.8	248.7	257.9
117.5°	180.6	188.9	229.7	257.5	267.5
120°	196.7	202.2	240.9	266.7	278.4
122.5°	214.8	215.2	251.9	278.3	286.2
125°	231.2	229.8	263.8	289.2	296.7
127.5°	247.2	246.8	273.6	297.6	307.0
130°	262.8	262.5	284.5	308.6	315.4
132.5°	280.2	279.6	295.7	318.4	326.2
135°	293.8	295.9	305.6	326.9	334.0
137.5°	310.5	310.2	316.4	336.0	343.2
140°	327.2	326.6	327.9	345.4	352.0
142.5°	341.2	341.9	340.1	355.2	360.7
145°	355.0	355.0	355.4	363.2	367.7
147.5°	369.2	369.6	369.3	370.3	375.4
150°	382.0	382.1	382.1	382.1	381.7
152.5°	392.7	393.4	393.8	394.8	393.8
155°	405.2	405.2	404.8	406.2	404.8
157.5°	415.8	415.1	415.1	416.2	415.1
160°	425.1	424.7	424.3	425.4	423.6
162.5°	433.6	432.5	432.2	434.3	432.5
165°	441.0	440.0	439.3	441.4	440.0
167.5°	447.1	445.7	445.7	447.8	445.7
170°	452.1	450.3	450.6	452.8	450.3
172.5°	455.6	454.2	454.2	456.7	454.2
175°	458.8	457.0	456.7	459.2	456.7
177.5°	460.2	458.5	458.5	460.9	458.1
180°	459.5	459.5	459.5	459.5	459.5

(END OF REPORT)