

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: P1011359

Luminaire Tested: S123DIP-B1165D365UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011359
REPORT IS A COMBINATION OF REPORTS P989485 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D365UB40-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

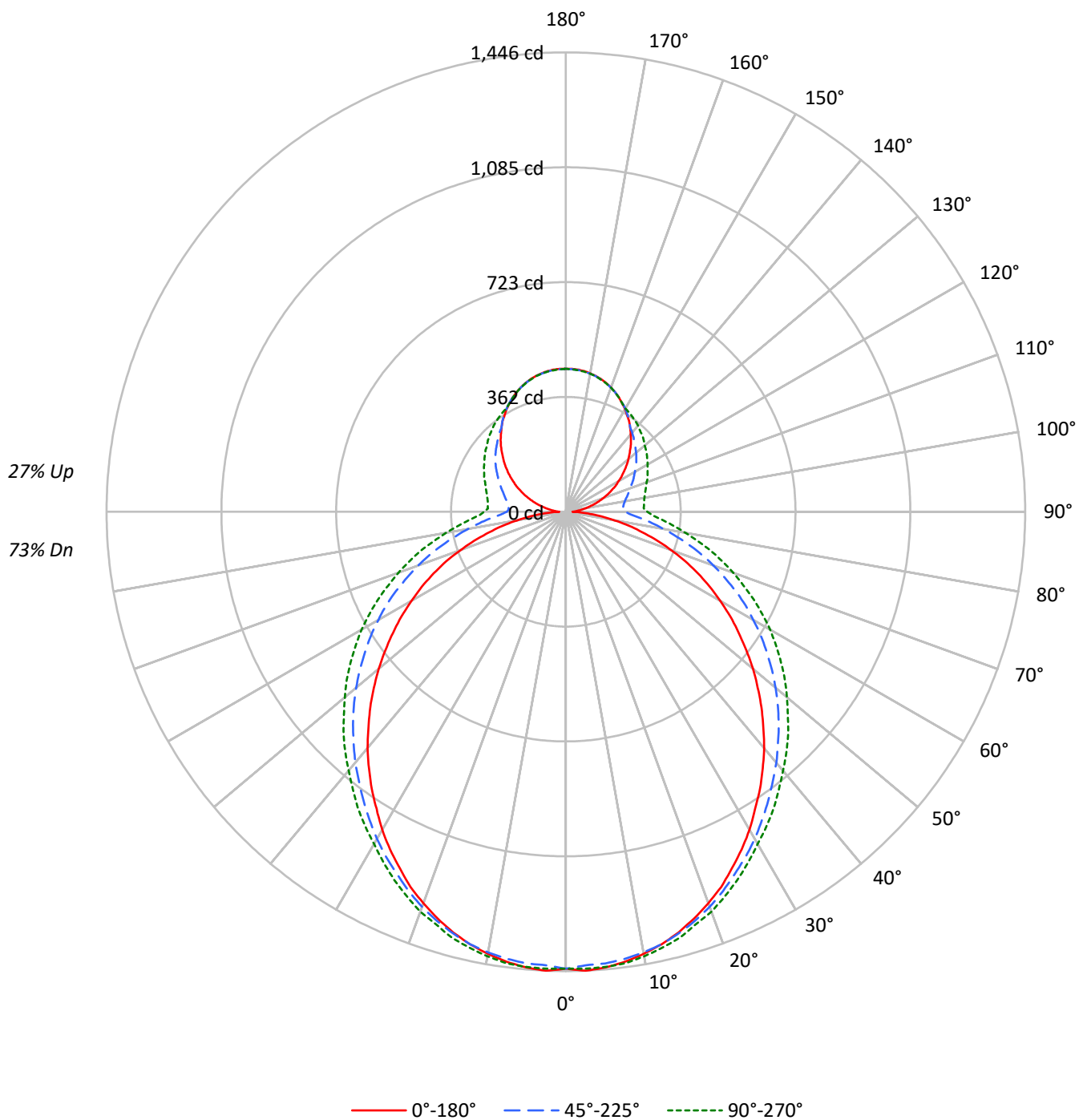
Lumens per Lamp: N/A
Luminaire Lumens: 6081.0 lumens
Efficiency: N/A
Efficacy: 86.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 70.6
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	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77
1	101	96	92	87	96	91	87	83	82	79	76	74	71	69	66	64	62
2	92	83	76	70	87	79	73	67	71	66	62	64	60	56	57	54	51
3	83	73	64	58	79	69	62	56	62	56	51	56	51	47	50	46	43
4	76	64	55	49	72	61	53	47	55	49	43	50	44	40	44	40	37
5	70	57	48	42	66	54	46	40	49	42	37	44	39	34	40	35	32
6	64	51	42	36	61	49	41	35	44	38	32	40	34	30	36	31	28
7	60	46	38	32	56	44	36	31	40	33	29	36	31	27	33	28	25
8	55	42	34	28	52	40	33	27	37	30	25	33	28	24	30	26	22
9	52	38	30	25	49	37	29	24	34	27	23	31	25	21	28	23	20
10	48	35	28	23	46	34	27	22	31	25	21	28	23	19	26	21	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15480	15480	15480
5°	15521	15025	15013
10°	15376	14618	14506
15°	15173	14168	13969
20°	14884	13668	13393
25°	14528	13103	12795
30°	14165	12593	12195
35°	13756	12058	11706
40°	13366	11567	11190
45°	12935	11093	10764
50°	12508	10623	10303
55°	12035	10141	9878
60°	11572	9647	9442
65°	11096	9122	8934
70°	10381	8533	8408
75°	9476	7861	7866
80°	8420	7181	7248
85°	7377	6630	6805

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12935 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.4	2.2
10°-20°	388.9	6.4
20°-30°	581.6	9.6
30°-40°	694.4	11.4
40°-50°	726.5	11.9
50°-60°	681.7	11.2
60°-70°	569.4	9.4
70°-80°	407.2	6.7
80°-90°	243.2	4.0
90°-100°	181.2	3.0
100°-110°	199.6	3.3
110°-120°	224.0	3.7
120°-130°	239.0	3.9
130°-140°	239.9	3.9
140°-150°	221.0	3.6
150°-160°	182.7	3.0
160°-170°	121.6	2.0
170°-180°	42.6	0.7
0°-30°	1106.9	18.2
0°-40°	1801.2	29.6
0°-60°	3209.4	52.8
0°-90°	4429.3	72.8
90°-120°	604.8	9.9
90°-150°	1304.7	21.5
90°-180°	1652.0	27.2
0°-180°	6081.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1438	1438	1438	1438	1438	
5°	1440	1436	1427	1440	1438	137
15°	1371	1375	1374	1390	1388	386
25°	1238	1253	1258	1278	1278	570
35°	1065	1090	1111	1134	1140	666
45°	871	909	948	978	990	672
55°	664	716	772	815	827	595
65°	459	520	589	636	652	454
75°	249	323	401	453	472	266
85°	77	155	238	291	307	79
90°	21	101	186	240	256	16
95°	38	102	181	231	247	36
105°	92	130	201	245	260	98
115°	158	178	234	272	284	157
125°	225	226	270	302	311	201
135°	288	289	306	333	340	222
145°	348	347	348	360	365	217
155°	396	396	397	398	396	182
165°	432	431	431	433	430	122
175°	449	448	448	450	447	43
180°	450	450	450	450	450	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1438.1	1438.1	1438.1	1438.1	1438.1
2.5°	1445.9	1441.2	1428.7	1441.2	1439.6
5°	1439.6	1436.5	1427.1	1439.6	1438.1
7.5°	1428.7	1428.7	1419.3	1434.9	1433.4
10°	1413.0	1416.1	1408.3	1424.0	1420.8
12.5°	1394.2	1398.9	1394.2	1408.3	1405.2
15°	1370.7	1375.4	1373.8	1389.5	1387.9
17.5°	1342.5	1351.9	1350.3	1364.4	1361.3
20°	1311.2	1320.6	1323.7	1337.8	1339.4
22.5°	1278.3	1287.7	1292.4	1311.2	1309.6
25°	1237.5	1253.2	1257.9	1278.3	1278.3
27.5°	1198.4	1215.6	1225.0	1242.2	1243.8
30°	1156.1	1176.5	1189.0	1207.8	1207.8
32.5°	1109.1	1132.6	1149.8	1170.2	1174.9
35°	1065.2	1090.3	1110.7	1134.2	1140.4
37.5°	1018.2	1046.4	1069.9	1096.6	1101.3
40°	971.2	999.4	1030.8	1057.4	1063.7
42.5°	919.5	955.6	988.5	1018.2	1027.6
45°	871.0	908.6	947.7	977.5	990.0
47.5°	819.3	861.6	905.4	938.3	947.7
50°	769.2	813.0	861.6	897.6	908.6
52.5°	715.9	762.9	817.7	855.3	869.4
55°	664.2	715.9	772.3	814.6	827.1
57.5°	614.1	667.3	728.4	770.7	784.8
60°	560.8	617.2	681.4	725.3	742.5
62.5°	510.7	568.6	637.6	681.4	697.1
65°	459.0	520.1	589.0	636.0	651.7
67.5°	407.3	471.5	540.4	592.1	604.7
70°	352.5	419.8	495.0	545.1	560.8
72.5°	302.3	369.7	448.0	499.7	515.4
75°	249.1	322.7	401.0	452.7	471.5
77.5°	203.6	277.3	355.6	410.4	424.5
80°	155.1	231.8	313.3	366.6	382.2
82.5°	112.8	191.1	274.1	327.4	343.1
85°	76.8	155.1	238.1	291.4	307.0
87.5°	47.0	125.3	205.2	258.5	274.1
90°	20.8	101.0	185.5	240.2	256.5
92.5°	29.4	98.9	179.3	232.1	245.5
95°	38.1	101.6	181.3	231.2	246.9
97.5°	50.0	108.2	183.9	232.7	247.9
100°	62.2	114.4	188.3	234.7	251.1
102.5°	76.5	121.5	194.4	239.3	254.6
105°	92.0	130.4	200.9	244.8	259.5
107.5°	108.9	142.2	207.8	251.2	264.9
110°	124.3	153.2	216.6	258.7	270.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	142.0	164.2	223.8	264.7	278.8
115°	158.1	177.9	233.6	271.6	283.8
117.5°	176.1	189.0	241.5	279.1	290.7
120°	191.2	201.1	251.1	286.7	297.0
122.5°	208.5	213.0	260.9	294.3	304.2
125°	224.6	225.7	270.4	301.8	311.4
127.5°	240.9	241.4	279.9	309.1	318.6
130°	257.1	258.4	288.7	317.0	323.9
132.5°	271.8	274.6	297.4	323.8	333.1
135°	288.4	289.0	305.9	332.7	339.8
137.5°	303.6	303.9	315.8	339.2	345.9
140°	318.0	319.8	324.8	348.0	353.3
142.5°	332.5	332.7	333.4	353.4	359.5
145°	347.7	346.8	347.9	360.0	364.9
147.5°	359.2	360.6	361.7	366.4	370.6
150°	373.0	373.7	374.4	374.4	375.4
152.5°	384.3	385.4	385.7	386.4	384.7
155°	396.3	396.3	396.7	398.1	395.6
157.5°	406.6	406.2	406.6	408.0	405.9
160°	416.1	415.4	415.4	417.2	415.8
162.5°	424.6	423.5	423.9	425.7	423.2
165°	431.7	430.6	430.6	432.7	430.3
167.5°	437.7	436.3	436.6	438.8	436.6
170°	442.6	441.2	441.2	443.7	441.2
172.5°	446.5	445.1	445.1	447.2	444.8
175°	449.0	447.6	447.6	449.7	447.2
177.5°	450.4	449.0	449.0	451.1	448.7
180°	450.1	450.1	450.1	450.1	450.1

(END OF REPORT)