

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: P1011358

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011358
REPORT IS A COMBINATION OF REPORTS P989484 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-D
Description: Define 3 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

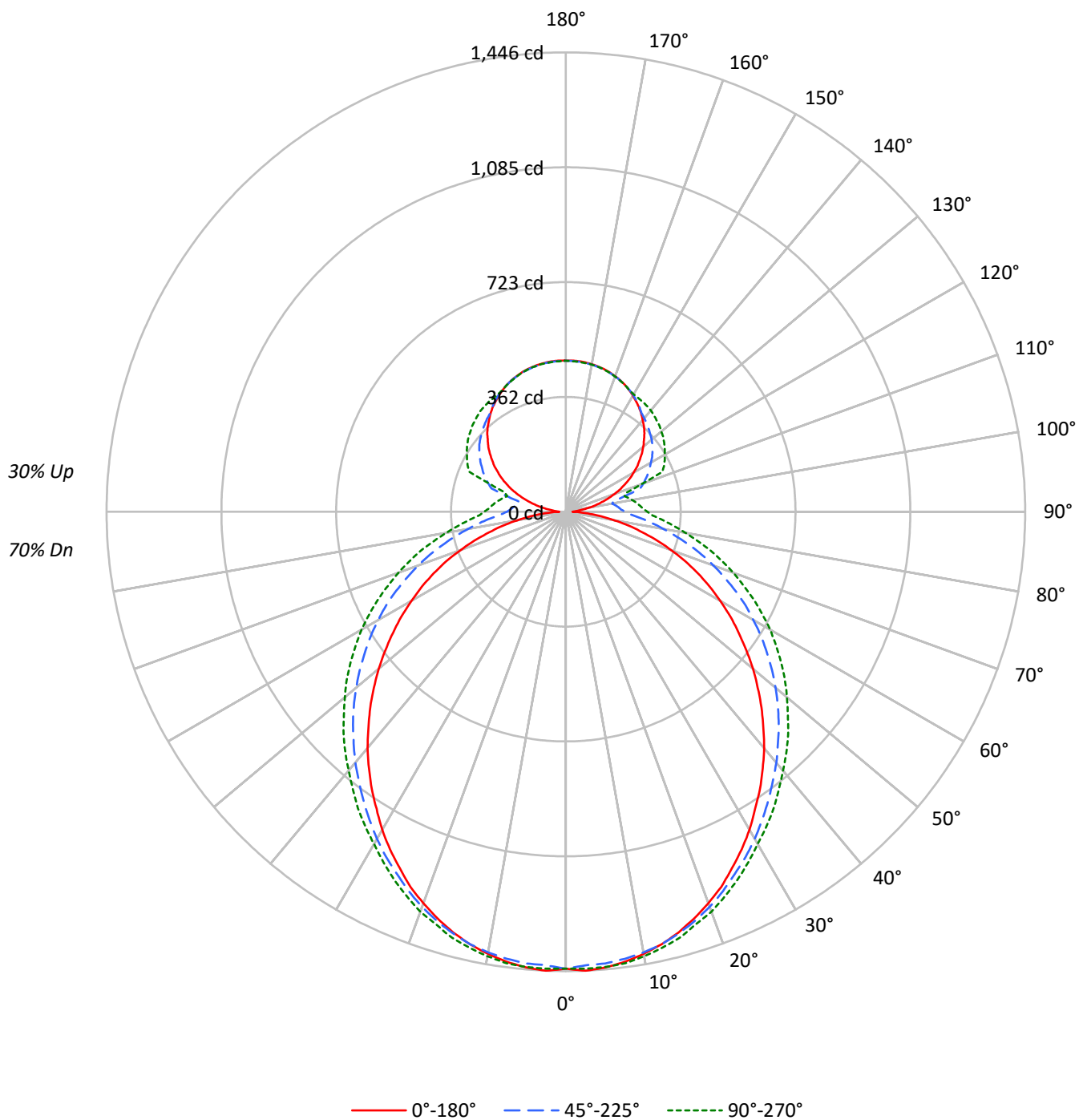
Lumens per Lamp: N/A
Luminaire Lumens: 6284.0 lumens
Efficiency: N/A
Efficacy: 89.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	112	112	112	112	106	106	106	106	95	95	95	84	84	84	75	75	75
1	101	96	91	87	95	91	87	83	81	78	75	72	70	67	64	62	60
2	91	83	76	70	86	78	72	67	70	65	61	62	59	55	55	52	50
3	83	72	64	58	78	69	61	55	61	55	51	55	50	46	49	45	42
4	76	64	55	49	71	61	53	47	54	48	43	49	43	39	43	39	36
5	70	57	48	41	65	54	46	40	49	42	37	44	38	34	39	34	31
6	64	51	42	36	60	48	40	35	44	37	32	39	34	29	35	31	27
7	59	46	38	32	56	44	36	30	40	33	28	36	30	26	32	27	24
8	55	42	34	28	52	40	32	27	36	30	25	33	27	23	29	25	21
9	51	38	30	25	48	37	29	24	33	27	22	30	25	21	27	23	19
10	48	35	28	22	45	34	27	22	31	25	20	28	23	19	25	21	17

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	6.2
20°-30°	581.6	9.3
30°-40°	694.4	11.0
40°-50°	726.5	11.6
50°-60°	681.7	10.8
60°-70°	569.4	9.1
70°-80°	407.2	6.5
80°-90°	243.2	3.9
90°-100°	169.0	2.7
100°-110°	193.0	3.1
110°-120°	273.4	4.4
120°-130°	294.9	4.7
130°-140°	288.6	4.6
140°-150°	256.0	4.1
150°-160°	203.3	3.2
160°-170°	131.2	2.1
170°-180°	45.2	0.7
0°-30°	1106.9	17.6
0°-40°	1801.2	28.7
0°-60°	3209.4	51.1
0°-90°	4429.3	70.5
90°-120°	635.5	10.1
90°-150°	1475.0	23.5
90°-180°	1855.0	29.5
0°-180°	6284.0	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°	39	85	166	217	233	39
105°	118	159	195	176	191	124
115°	205	226	286	327	341	203
125°	283	286	333	366	378	254
135°	350	350	369	398	405	269
145°	402	402	403	416	423	251
155°	441	440	440	442	440	203
165°	465	464	463	466	464	131
175°	476	474	474	477	474	45
180°	476	476	476	476	476	

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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°	26.9	92.2	173.7	227.9	242.3
95°	38.8	85.4	166.1	217.0	232.7
97.5°	54.9	101.4	157.0	206.8	222.8
100°	73.8	131.0	148.0	196.2	212.2
102.5°	95.5	144.0	153.0	185.2	201.6
105°	117.8	159.3	194.9	176.2	190.9
107.5°	140.0	176.1	245.6	233.4	201.3
110°	162.1	193.1	259.7	288.7	250.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	184.7	209.0	272.5	314.8	328.2
115°	205.3	226.3	285.8	327.0	341.0
117.5°	227.2	242.3	297.3	337.7	350.7
120°	245.9	256.9	309.6	348.5	359.5
122.5°	266.4	272.0	322.0	358.1	369.5
125°	283.2	286.0	332.8	366.4	378.1
127.5°	301.5	302.8	343.7	376.1	386.4
130°	318.5	319.7	352.5	383.7	392.3
132.5°	333.2	336.0	360.5	390.2	400.1
135°	349.8	350.4	369.0	398.3	405.0
137.5°	363.9	365.2	376.8	403.7	410.8
140°	376.5	378.7	384.4	409.3	416.4
142.5°	389.6	390.1	391.2	412.6	419.4
145°	401.6	402.5	403.2	416.4	422.7
147.5°	411.7	413.5	414.2	419.6	424.1
150°	422.3	423.3	424.1	424.8	426.8
152.5°	431.8	432.2	432.5	433.9	432.2
155°	440.7	440.0	440.3	442.1	440.0
157.5°	447.7	447.7	447.4	449.5	446.7
160°	454.1	453.7	453.4	455.5	453.0
162.5°	460.1	459.0	458.7	461.2	459.0
165°	464.7	463.6	463.3	466.1	463.6
167.5°	468.6	467.2	467.2	470.0	467.2
170°	471.8	470.3	470.3	473.2	470.3
172.5°	473.9	472.1	472.5	475.3	472.1
175°	475.6	473.9	474.2	476.7	473.9
177.5°	476.4	474.6	474.9	477.8	474.2
180°	475.6	475.6	475.6	475.6	475.6

(END OF REPORT)