

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: P1011443

Luminaire Tested: S123DIP-B1165D805UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011443
REPORT IS A COMBINATION OF REPORTS P989605 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D805UB40-4F0-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

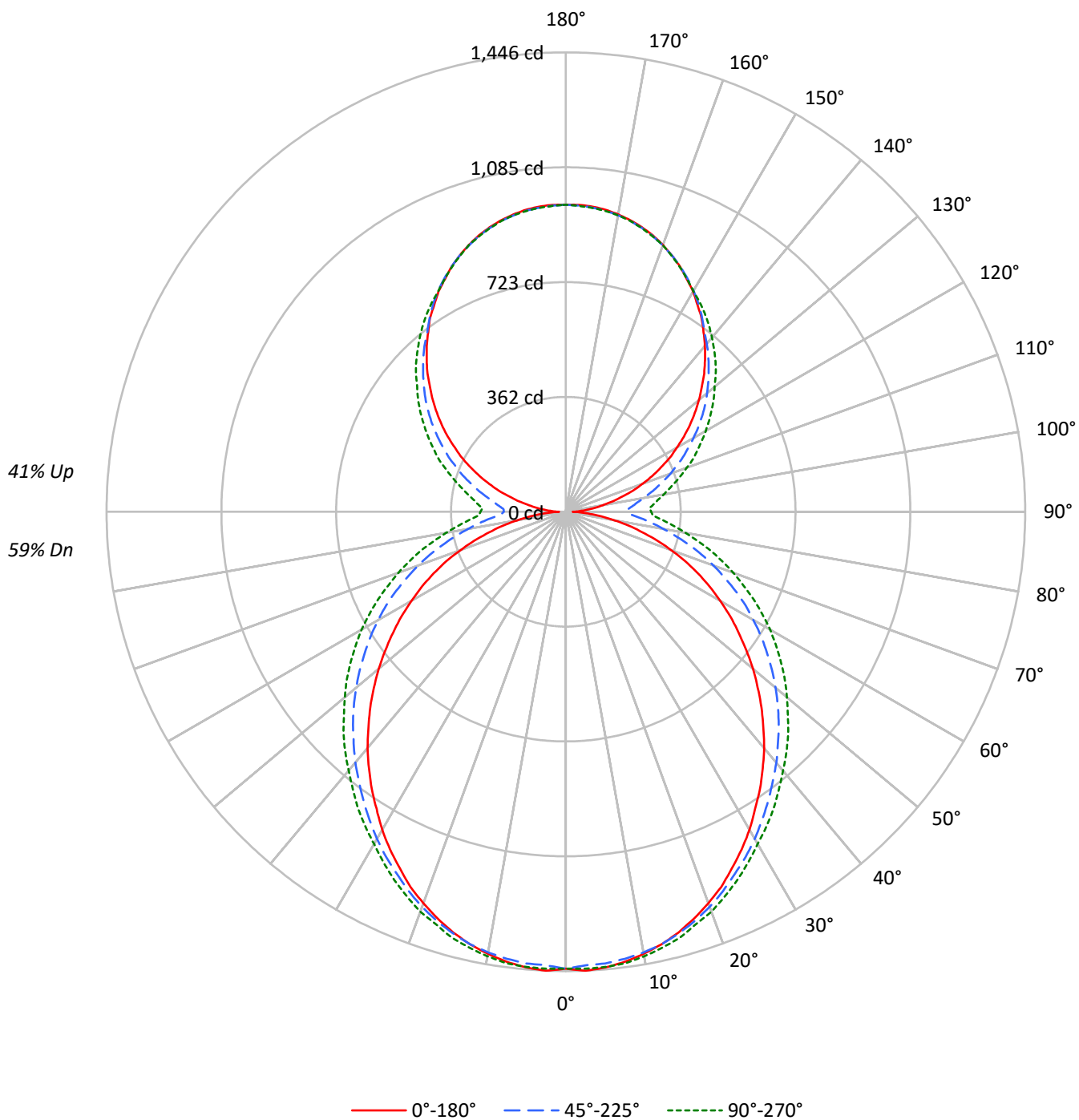
Lumens per Lamp: N/A
Luminaire Lumens: 7513.0 lumens
Efficiency: N/A
Efficacy: 91.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 82.4
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	102	102	102	102	88	88	88	76	76	76	64	64	64
1	99	94	89	85	92	87	83	80	76	73	70	65	63	61	55	53	52
2	89	81	74	69	83	76	70	65	66	61	57	56	53	50	48	45	43
3	81	71	63	57	75	66	59	54	57	52	47	49	45	42	42	39	36
4	74	63	54	48	69	58	51	45	51	45	40	44	39	35	37	34	31
5	68	56	47	41	63	52	44	39	45	39	34	39	34	30	33	30	26
6	63	50	41	35	58	47	39	33	41	35	30	35	30	27	30	26	23
7	58	45	37	31	54	42	35	29	37	31	26	32	27	23	28	24	21
8	54	41	33	27	50	38	31	26	34	28	23	29	24	21	25	21	18
9	50	37	29	24	46	35	28	23	31	25	21	27	22	19	23	19	17
10	47	34	27	22	43	32	25	21	28	23	19	25	20	17	22	18	15

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	1.8
10°-20°	388.9	5.2
20°-30°	581.6	7.7
30°-40°	694.4	9.2
40°-50°	726.5	9.7
50°-60°	681.7	9.1
60°-70°	569.4	7.6
70°-80°	407.2	5.4
80°-90°	244.3	3.3
90°-100°	214.5	2.9
100°-110°	300.2	4.0
110°-120°	395.3	5.3
120°-130°	464.4	6.2
130°-140°	493.2	6.6
140°-150°	470.0	6.3
150°-160°	392.4	5.2
160°-170°	261.2	3.5
170°-180°	91.5	1.2
0°-30°	1106.9	14.7
0°-40°	1801.2	24.0
0°-60°	3209.4	42.7
0°-90°	4430.4	59.0
90°-120°	910.0	12.1
90°-150°	2337.6	31.1
90°-180°	3083.0	41.0
0°-180°	7513.0	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	106	195	252	269	18
95°	62	128	211	263	278	63
105°	183	222	297	341	356	196
115°	330	352	406	445	457	328
125°	477	479	523	553	561	426
135°	616	619	635	660	667	475
145°	745	745	747	759	762	465
155°	851	851	852	855	850	392
165°	927	925	925	929	924	261
175°	964	961	961	966	960	92
180°	966	966	966	966	966	

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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°	21.2	105.5	195.2	251.6	268.7
92.5°	41.6	113.5	196.4	250.4	262.9
95°	62.0	128.4	211.3	262.8	278.5
97.5°	89.3	149.5	227.7	278.5	293.3
100°	117.4	172.0	247.9	295.6	312.8
102.5°	149.9	196.1	271.9	318.0	332.9
105°	183.3	222.4	296.7	340.6	356.1
107.5°	221.3	255.0	322.2	366.8	380.1
110°	256.1	285.9	350.1	393.8	404.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	294.1	316.8	376.4	419.3	433.4
115°	330.5	351.5	406.4	444.8	456.6
117.5°	369.2	382.5	434.2	471.8	482.2
120°	403.4	415.7	463.6	498.9	508.4
122.5°	440.6	446.7	493.8	525.9	534.6
125°	476.9	479.2	523.1	553.0	560.9
127.5°	511.9	514.8	552.5	579.2	587.2
130°	546.8	551.3	580.4	607.0	611.1
132.5°	580.1	586.2	608.2	632.6	639.8
135°	615.8	618.8	635.3	660.4	666.7
137.5°	648.4	650.7	663.9	685.2	690.7
140°	681.1	684.9	690.4	713.1	715.6
142.5°	712.2	714.4	715.9	735.6	739.6
145°	744.9	744.8	747.1	758.8	762.1
147.5°	771.4	774.4	776.7	781.4	783.1
150°	801.0	802.5	804.0	804.0	802.6
152.5°	825.3	827.5	828.3	829.8	826.0
155°	851.1	851.1	851.8	854.9	849.6
157.5°	873.1	872.3	873.1	876.1	871.6
160°	893.6	892.1	892.1	895.9	892.8
162.5°	911.8	909.5	910.3	914.1	908.8
165°	927.0	924.7	924.7	929.3	924.0
167.5°	939.9	936.9	937.6	942.2	937.6
170°	950.5	947.5	947.5	952.8	947.5
172.5°	958.9	955.9	955.9	960.4	955.1
175°	964.2	961.2	961.2	965.7	960.4
177.5°	967.2	964.2	964.2	968.8	963.4
180°	966.5	966.5	966.5	966.5	966.5

(END OF REPORT)