

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: P1012019

Luminaire Tested: S123DIP-B775D365UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012019
REPORT IS A COMBINATION OF REPORTS P990388 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B775D365UB40-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

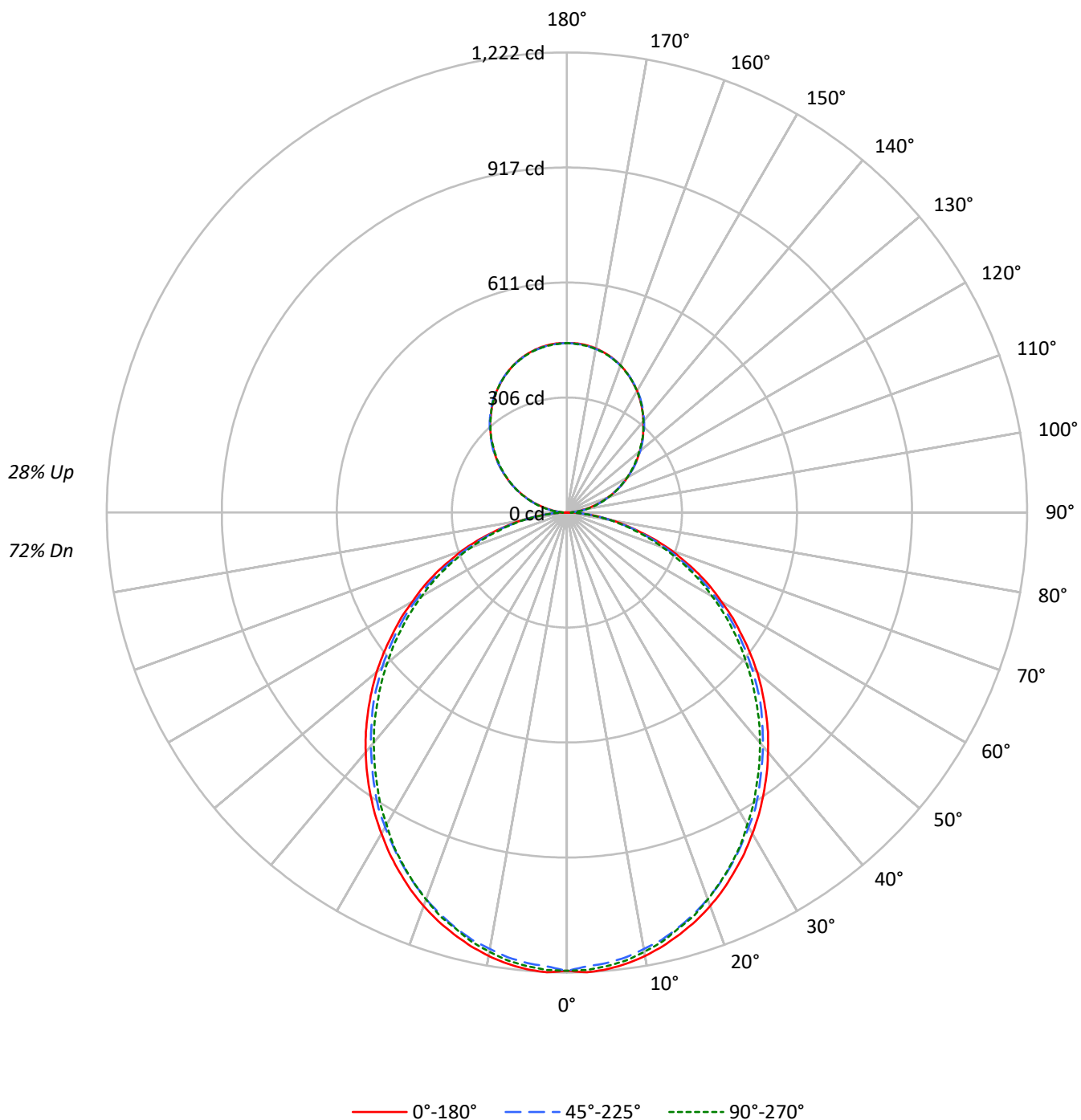
Lumens per Lamp: N/A
Luminaire Lumens: 4416.0 lumens
Efficiency: N/A
Efficacy: 97.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 45.2
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	85	85	85	76	76	76
1	103	98	94	90	97	93	89	86	84	81	78	75	73	71	67	66	64
2	93	86	79	74	88	81	76	71	73	69	65	66	62	59	59	56	54
3	85	75	68	62	80	72	65	59	65	59	55	58	54	50	52	49	46
4	78	67	58	52	74	64	56	50	58	51	47	52	47	43	47	43	40
5	72	60	51	45	68	57	49	43	52	45	40	47	41	37	42	38	34
6	66	54	45	39	62	51	43	38	47	40	35	42	37	33	38	34	30
7	61	48	40	34	58	46	39	33	42	36	31	39	33	29	35	30	27
8	57	44	36	31	54	42	35	30	39	32	28	35	30	26	32	28	24
9	53	40	33	27	50	39	32	27	36	29	25	33	27	23	30	25	22
10	50	37	30	25	47	36	29	24	33	27	23	30	25	21	28	23	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13103	13103	13103
5°	13135	12651	12631
10°	13018	12222	12097
15°	12837	11777	11514
20°	12630	11282	10937
25°	12361	10762	10320
30°	12067	10221	9670
35°	11760	9669	9025
40°	11437	9091	8391
45°	11083	8527	7728
50°	10723	7898	7063
55°	10259	7243	6387
60°	9783	6520	5671
65°	9336	5738	4922
70°	8693	4872	4048
75°	7764	3858	3143
80°	6705	2712	2223
85°	5225	1456	1113

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11083 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.8	2.6
10°-20°	324.0	7.3
20°-30°	478.6	10.8
30°-40°	558.9	12.7
40°-50°	561.9	12.7
50°-60°	493.6	11.2
60°-70°	367.6	8.3
70°-80°	209.2	4.7
80°-90°	60.4	1.4
90°-100°	29.0	0.7
100°-110°	87.7	2.0
110°-120°	149.3	3.4
120°-130°	196.4	4.4
130°-140°	220.7	5.0
140°-150°	217.0	4.9
150°-160°	182.7	4.1
160°-170°	121.6	2.8
170°-180°	42.6	1.0
0°-30°	917.4	20.8
0°-40°	1476.3	33.4
0°-60°	2531.7	57.3
0°-90°	3169.0	71.8
90°-120°	265.9	6.0
90°-150°	900.1	20.4
90°-180°	1247.0	28.2
0°-180°	4416.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1217	1217	1217	1217	1217	
5°	1218	1213	1202	1212	1210	116
15°	1160	1156	1142	1150	1144	327
25°	1053	1047	1033	1034	1031	485
35°	911	904	891	884	879	570
45°	746	742	728	716	711	576
55°	566	565	552	540	535	507
65°	386	381	370	362	359	381
75°	204	200	197	192	188	218
85°	54	52	52	50	50	58
90°	0	4	8	10	11	5
95°	21	23	26	28	28	23
105°	80	80	83	83	84	85
115°	150	151	151	151	151	149
125°	220	221	220	219	217	196
135°	285	287	287	286	285	220
145°	346	347	348	348	346	216
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°	1217.3	1217.3	1217.3	1217.3	1217.3
2.5°	1222.5	1218.3	1206.8	1217.3	1216.2
5°	1218.3	1213.1	1201.6	1212.0	1209.9
7.5°	1208.9	1203.7	1192.1	1201.6	1200.5
10°	1196.3	1191.1	1177.5	1186.9	1184.8
12.5°	1179.6	1175.4	1162.8	1169.1	1168.1
15°	1159.7	1155.5	1141.9	1150.3	1144.0
17.5°	1137.7	1132.5	1118.9	1125.2	1123.1
20°	1112.6	1106.3	1092.7	1096.9	1093.8
22.5°	1084.3	1078.1	1064.5	1067.6	1063.4
25°	1052.9	1046.7	1033.1	1034.1	1031.0
27.5°	1020.5	1014.2	999.6	1000.6	997.5
30°	984.9	979.7	965.0	965.0	957.7
32.5°	949.3	942.0	931.5	924.2	921.1
35°	910.6	904.3	890.7	884.4	879.2
37.5°	871.9	863.5	849.9	842.6	839.4
40°	831.0	824.8	810.1	801.7	797.6
42.5°	790.2	782.9	768.2	759.9	755.7
45°	746.3	742.1	728.5	715.9	710.7
47.5°	703.4	697.1	684.5	672.0	667.8
50°	659.4	654.2	640.6	629.0	622.8
52.5°	613.3	610.2	595.5	586.1	579.8
55°	566.2	565.2	551.6	540.1	534.8
57.5°	522.3	518.1	507.6	497.2	490.9
60°	474.1	473.1	460.5	451.1	445.9
62.5°	431.2	428.1	415.5	406.1	403.0
65°	386.2	381.0	370.5	362.1	359.0
67.5°	338.1	333.9	325.5	318.2	314.0
70°	295.2	288.9	282.6	275.3	270.0
72.5°	250.2	246.0	238.6	232.4	230.3
75°	204.1	199.9	196.8	191.5	188.4
77.5°	163.3	161.2	157.0	152.8	152.8
80°	123.5	120.4	118.3	117.2	117.2
82.5°	84.8	84.8	84.8	82.7	81.6
85°	54.4	52.3	52.3	50.2	50.2
87.5°	27.2	24.1	23.0	22.0	22.0
90°	0.4	3.9	8.5	9.9	10.6
92.5°	10.6	12.7	14.8	15.9	15.2
95°	20.9	23.3	26.2	27.6	27.6
97.5°	34.3	36.1	38.2	40.0	39.6
100°	48.1	50.2	52.0	53.0	53.7
102.5°	64.0	65.1	67.5	68.6	68.2
105°	79.5	80.3	83.4	83.4	84.1
107.5°	97.9	98.3	99.7	100.8	100.4
110°	114.9	115.6	116.3	117.7	117.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	132.6	132.9	132.9	134.7	134.7
115°	150.3	151.3	150.6	151.0	150.6
117.5°	168.3	168.6	167.9	167.9	166.9
120°	184.9	187.0	185.3	184.9	184.2
122.5°	202.2	203.6	202.9	201.9	200.8
125°	219.9	221.0	220.3	218.8	217.4
127.5°	236.2	238.3	237.6	235.5	234.0
130°	252.4	255.3	254.2	252.8	250.3
132.5°	268.7	271.5	270.8	269.0	267.3
135°	285.3	287.4	287.1	285.7	285.0
137.5°	300.5	302.3	303.3	301.6	300.5
140°	316.4	318.2	318.5	318.2	315.7
142.5°	330.9	332.7	333.4	333.0	331.3
145°	346.1	346.8	347.9	347.5	346.1
147.5°	359.2	360.6	361.7	361.7	359.6
150°	373.0	373.7	374.4	374.4	372.3
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)