

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: HALO COMMERCIAL

Report Number: P238351

Luminaire Tested: **PRS630D010-S6M24-61SWWH-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P238351
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-26)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS630D010-S6M24-61SWWH-4000K
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" WALL WASH DISTRIBUTION, WW TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1903.0 lumens
Efficiency: N/A
Efficacy: 74.6 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 0.98 / 1.08
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

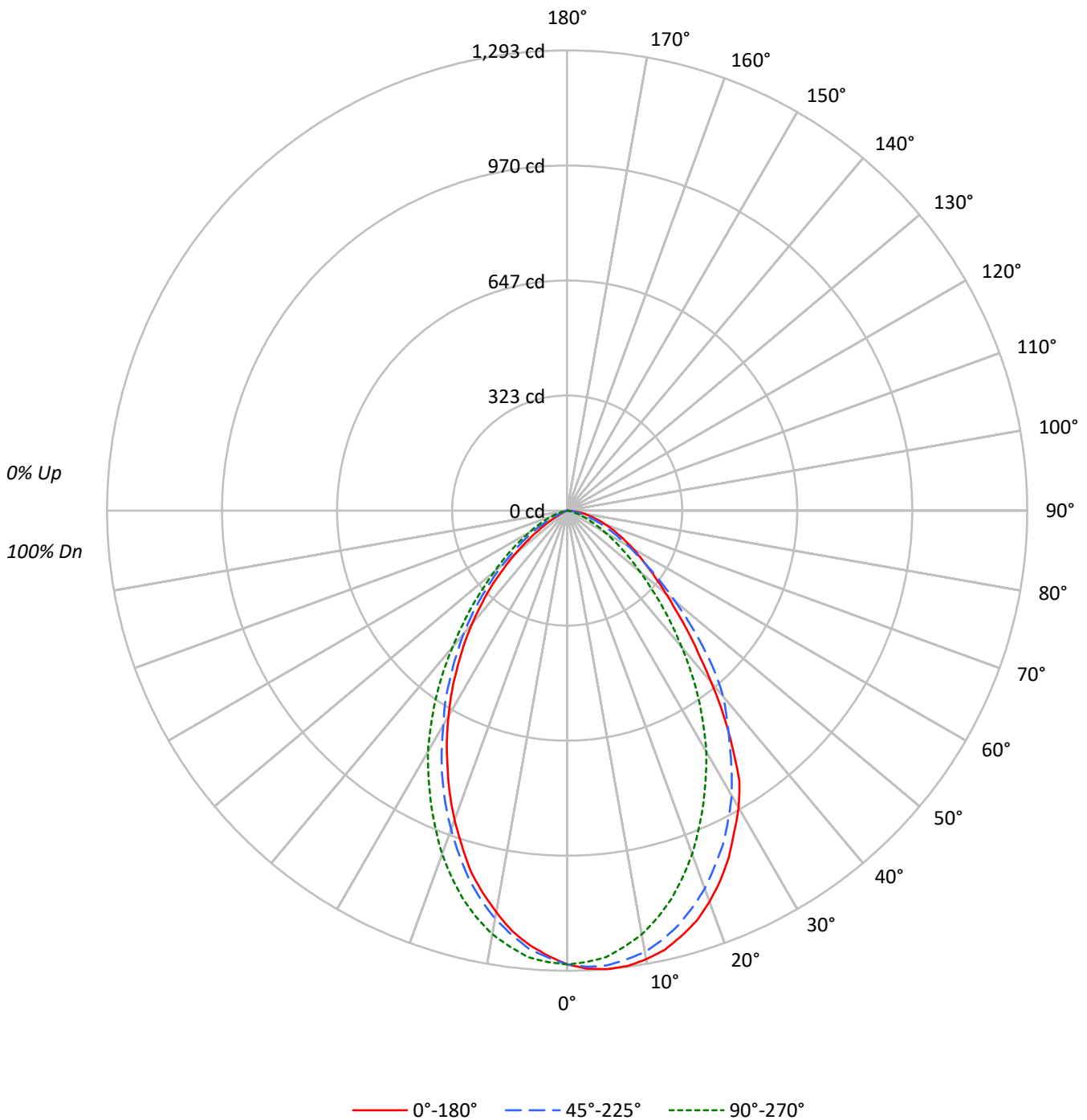
Input Watts (W): 25.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90					90			
2	104	98	92	88	102	96	91	87	93	89	85	89	86	83	87	84	81	80					80			
3	97	89	82	77	95	87	81	76	84	79	75	82	77	74	79	76	73	71					71			
4	90	81	73	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63					63			
5	84	74	66	61	82	73	66	60	71	64	60	69	63	59	67	62	59	57					57			
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51					51			
7	74	62	55	50	72	61	54	49	60	54	49	59	53	49	57	52	48	47					47			
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43					43			
9	65	54	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39					39			
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	54896	54896	54896
5°	55901	54423	52940
10°	55975	52862	50099
15°	55188	50374	46732
20°	53590	47074	42364
25°	51060	43051	37792
30°	47932	38898	33136
35°	42506	33786	28246
40°	35387	28131	23393
45°	29191	22779	18285
50°	24174	17824	12881
55°	20763	14037	7709
60°	18376	10661	3401
65°	16107	7784	1070
70°	14590	5300	667
75°	12709	3510	433
80°	11108	1959	0
85°	7805	1284	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.6	6.2
10°-20°	318.4	16.7
20°-30°	424.4	22.3
30°-40°	418.9	22.0
40°-50°	314.2	16.5
50°-60°	184.4	9.7
60°-70°	85.8	4.5
70°-80°	32.2	1.7
80°-90°	6.1	0.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	861.4	45.3
0°-40°	1280.4	67.3
0°-60°	1778.9	93.5
0°-90°	1903.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1903.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1275	1275	1275	1275	1275	
5°	1293	1283	1259	1236	1225	123
15°	1238	1206	1130	1070	1048	348
25°	1075	1035	906	830	796	493
35°	809	796	643	572	537	502
45°	479	537	374	337	300	372
55°	277	282	187	155	103	250
65°	158	137	76	37	10	159
75°	76	55	21	3	3	82
85°	16	8	3	0	0	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0
2.5°	1288.2	1288.2	1288.2	1288.2	1285.5	1285.5	1285.5	1285.5	1285.5	1282.9	1282.9
5°	1293.4	1293.4	1290.8	1290.8	1290.8	1290.8	1288.2	1288.2	1285.5	1285.5	1282.9
7.5°	1290.8	1288.2	1288.2	1288.2	1285.5	1285.5	1285.5	1282.9	1280.3	1277.6	1272.3
10°	1280.3	1280.3	1280.3	1277.6	1275.0	1275.0	1275.0	1269.7	1267.1	1261.8	1259.2
12.5°	1264.4	1261.8	1261.8	1259.2	1256.5	1256.5	1253.9	1248.6	1246.0	1240.7	1235.5
15°	1238.1	1238.1	1238.1	1235.5	1232.8	1230.2	1227.6	1224.9	1219.7	1214.4	1206.5
17.5°	1209.1	1206.5	1206.5	1203.9	1198.6	1198.6	1196.0	1190.7	1185.4	1180.2	1169.6
20°	1169.6	1169.6	1169.6	1167.0	1164.3	1159.1	1159.1	1151.2	1145.9	1138.0	1130.1
22.5°	1124.8	1124.8	1124.8	1122.2	1119.6	1116.9	1114.3	1109.0	1101.1	1093.2	1082.7
25°	1074.8	1072.1	1072.1	1072.1	1069.5	1066.9	1064.2	1059.0	1053.7	1045.8	1035.3
27.5°	1016.8	1014.2	1014.2	1014.2	1011.6	1008.9	1006.3	1006.3	1001.0	990.5	979.9
30°	964.1	964.1	964.1	958.9	953.6	951.0	951.0	945.7	937.8	932.5	924.6
32.5°	900.9	900.9	903.6	900.9	900.9	900.9	895.6	890.4	879.8	871.9	858.8
35°	808.7	814.0	816.6	821.9	827.2	832.4	835.1	835.1	824.5	811.4	795.5
37.5°	719.2	721.8	724.4	735.0	740.2	745.5	748.1	758.7	766.6	753.4	737.6
40°	629.6	632.2	640.1	642.8	655.9	658.6	666.5	677.0	687.5	690.2	682.3
42.5°	547.9	550.6	555.8	561.1	574.3	582.2	584.8	592.7	605.9	616.4	613.8
45°	479.4	479.4	482.1	490.0	497.9	503.1	511.0	521.6	532.1	537.4	537.4
47.5°	413.6	413.6	416.2	424.1	434.7	434.7	439.9	450.5	463.6	463.6	463.6
50°	360.9	363.5	363.5	368.8	374.1	376.7	382.0	392.5	397.8	397.8	395.1
52.5°	316.1	316.1	318.7	321.4	324.0	329.3	329.3	334.6	339.8	339.8	334.6
55°	276.6	276.6	276.6	279.2	281.9	284.5	287.1	289.8	287.1	284.5	281.9
57.5°	242.4	242.4	242.4	242.4	245.0	247.6	247.6	247.6	245.0	242.4	234.4
60°	213.4	213.4	213.4	213.4	213.4	213.4	213.4	210.7	205.5	202.8	197.6
62.5°	184.4	184.4	184.4	184.4	184.4	184.4	181.8	179.1	176.5	168.6	163.3
65°	158.1	160.7	160.7	158.1	158.1	155.4	155.4	150.2	147.5	142.3	137.0
67.5°	137.0	137.0	137.0	137.0	134.3	131.7	131.7	126.4	123.8	118.5	110.6
70°	115.9	115.9	113.3	113.3	113.3	110.6	108.0	105.4	100.1	94.8	89.6
72.5°	94.8	94.8	94.8	94.8	89.6	89.6	86.9	84.3	79.0	76.4	71.1
75°	76.4	76.4	76.4	73.8	73.8	71.1	68.5	65.9	63.2	58.0	55.3
77.5°	60.6	60.6	60.6	58.0	55.3	55.3	52.7	50.1	47.4	44.8	39.5
80°	44.8	44.8	42.1	42.1	39.5	39.5	39.5	36.9	34.2	31.6	29.0
82.5°	29.0	29.0	29.0	29.0	26.3	26.3	23.7	23.7	21.1	18.4	18.4
85°	15.8	15.8	15.8	15.8	13.2	13.2	13.2	13.2	10.5	10.5	7.9
87.5°	2.6	2.6	2.6	2.6	2.6	2.6	5.3	2.6	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0
2.5°	1280.3	1280.3	1277.6	1277.6	1277.6	1275.0	1275.0	1272.3	1272.3	1269.7	1269.7
5°	1280.3	1277.6	1275.0	1272.3	1269.7	1269.7	1267.1	1261.8	1259.2	1259.2	1253.9
7.5°	1269.7	1267.1	1261.8	1259.2	1256.5	1253.9	1248.6	1246.0	1240.7	1235.5	1232.8
10°	1253.9	1248.6	1240.7	1235.5	1235.5	1230.2	1224.9	1219.7	1211.8	1209.1	1201.2
12.5°	1227.6	1219.7	1214.4	1209.1	1203.9	1201.2	1193.3	1188.1	1177.5	1172.2	1164.3
15°	1198.6	1190.7	1182.8	1172.2	1169.6	1164.3	1156.4	1145.9	1140.6	1130.1	1122.2
17.5°	1164.3	1151.2	1143.3	1132.7	1127.5	1122.2	1109.0	1101.1	1093.2	1080.0	1072.1
20°	1119.6	1109.0	1098.5	1085.3	1080.0	1072.1	1061.6	1048.4	1037.9	1027.4	1016.8
22.5°	1072.1	1061.6	1048.4	1035.3	1027.4	1019.5	1006.3	993.1	979.9	966.8	958.9
25°	1019.5	1006.3	993.1	979.9	969.4	964.1	948.3	935.2	919.4	906.2	895.6
27.5°	966.8	953.6	937.8	919.4	908.8	903.6	887.7	869.3	853.5	843.0	829.8
30°	908.8	893.0	874.6	858.8	848.2	840.3	827.2	808.7	795.5	782.4	763.9
32.5°	845.6	829.8	816.6	795.5	787.6	779.7	761.3	742.9	724.4	711.3	700.7
35°	782.4	771.8	756.0	735.0	721.8	711.3	687.5	671.7	655.9	642.8	632.2
37.5°	724.4	708.6	682.3	658.6	648.0	640.1	613.8	598.0	579.5	571.6	555.8
40°	661.2	637.5	613.8	590.1	579.5	569.0	550.6	526.9	513.7	500.5	490.0
42.5°	598.0	566.4	542.7	521.6	508.4	497.9	476.8	458.4	442.6	434.7	424.1
45°	526.9	503.1	476.8	453.1	445.2	432.0	413.6	397.8	384.6	374.1	366.2
47.5°	453.1	439.9	413.6	392.5	382.0	371.4	355.6	339.8	326.6	316.1	310.8
50°	387.2	376.7	358.3	334.6	326.6	316.1	300.3	289.8	276.6	266.1	260.8
52.5°	326.6	316.1	302.9	284.5	274.0	268.7	252.9	242.4	234.4	226.5	218.6
55°	274.0	263.4	252.9	237.1	229.2	221.3	210.7	200.2	192.3	187.0	181.8
57.5°	229.2	218.6	208.1	197.6	189.7	184.4	173.9	168.6	160.7	152.8	150.2
60°	189.7	181.8	173.9	163.3	158.1	150.2	142.3	134.3	129.1	123.8	118.5
62.5°	158.1	150.2	142.3	131.7	129.1	123.8	115.9	108.0	102.7	100.1	94.8
65°	129.1	121.2	115.9	108.0	102.7	100.1	92.2	86.9	81.7	76.4	71.1
67.5°	105.4	100.1	94.8	86.9	81.7	79.0	71.1	65.9	63.2	58.0	55.3
70°	84.3	79.0	73.8	68.5	63.2	60.6	55.3	50.1	47.4	42.1	39.5
72.5°	65.9	60.6	58.0	50.1	47.4	44.8	39.5	36.9	34.2	31.6	29.0
75°	50.1	47.4	42.1	36.9	34.2	34.2	29.0	26.3	23.7	21.1	18.4
77.5°	36.9	34.2	29.0	26.3	23.7	23.7	21.1	18.4	15.8	13.2	13.2
80°	26.3	21.1	18.4	15.8	15.8	13.2	13.2	10.5	7.9	7.9	5.3
82.5°	15.8	13.2	10.5	10.5	7.9	7.9	7.9	5.3	5.3	2.6	2.6
85°	7.9	5.3	5.3	5.3	2.6	2.6	2.6	2.6	2.6	2.6	2.6
87.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0
2.5°	1267.1	1264.4	1264.4	1264.4	1261.8	1261.8	1259.2	1259.2	1256.5	1256.5	1256.5
5°	1251.3	1248.6	1246.0	1243.4	1243.4	1240.7	1238.1	1238.1	1235.5	1232.8	1230.2
7.5°	1227.6	1224.9	1222.3	1217.0	1214.4	1211.8	1209.1	1203.9	1201.2	1198.6	1198.6
10°	1196.0	1190.7	1185.4	1182.8	1182.8	1174.9	1172.2	1169.6	1164.3	1161.7	1156.4
12.5°	1156.4	1151.2	1145.9	1140.6	1138.0	1132.7	1130.1	1124.8	1119.6	1114.3	1109.0
15°	1114.3	1106.4	1098.5	1095.9	1090.6	1088.0	1080.0	1072.1	1069.5	1064.2	1061.6
17.5°	1061.6	1051.1	1048.4	1043.2	1037.9	1032.6	1027.4	1019.5	1011.6	1008.9	1001.0
20°	1006.3	998.4	987.8	985.2	979.9	974.7	966.8	958.9	953.6	948.3	943.1
22.5°	945.7	940.4	927.3	924.6	919.4	911.5	903.6	895.6	893.0	885.1	879.8
25°	885.1	871.9	864.0	858.8	856.1	848.2	843.0	835.1	829.8	821.9	816.6
27.5°	816.6	808.7	800.8	792.9	790.3	785.0	777.1	769.2	763.9	756.0	750.8
30°	756.0	745.5	735.0	729.7	727.1	716.5	711.3	706.0	695.4	690.2	687.5
32.5°	687.5	677.0	669.1	669.1	661.2	655.9	645.4	640.1	637.5	627.0	621.7
35°	619.1	611.1	605.9	603.2	600.6	590.1	584.8	579.5	571.6	569.0	561.1
37.5°	550.6	540.0	534.8	532.1	529.5	526.9	524.2	516.3	511.0	505.8	500.5
40°	479.4	474.2	468.9	468.9	466.3	463.6	458.4	455.7	453.1	447.8	442.6
42.5°	418.8	410.9	408.3	405.7	405.7	400.4	400.4	397.8	395.1	389.9	384.6
45°	358.3	353.0	350.4	345.1	345.1	342.5	342.5	342.5	337.2	334.6	331.9
47.5°	305.6	300.3	297.7	295.0	292.4	289.8	289.8	289.8	284.5	284.5	279.2
50°	255.5	250.3	250.3	250.3	247.6	245.0	242.4	237.1	237.1	234.4	231.8
52.5°	216.0	210.7	208.1	205.5	205.5	202.8	200.2	197.6	192.3	189.7	187.0
55°	176.5	173.9	168.6	168.6	166.0	163.3	160.7	158.1	155.4	147.5	144.9
57.5°	144.9	139.6	137.0	134.3	134.3	131.7	126.4	123.8	118.5	113.3	108.0
60°	115.9	110.6	108.0	105.4	105.4	100.1	97.5	92.2	86.9	81.7	76.4
62.5°	89.6	86.9	81.7	79.0	79.0	76.4	71.1	65.9	60.6	55.3	47.4
65°	68.5	65.9	60.6	60.6	58.0	52.7	47.4	42.1	36.9	31.6	26.3
67.5°	50.1	47.4	44.8	42.1	39.5	34.2	29.0	23.7	18.4	13.2	7.9
70°	36.9	34.2	29.0	29.0	26.3	21.1	15.8	10.5	7.9	5.3	5.3
72.5°	23.7	21.1	18.4	15.8	13.2	10.5	5.3	2.6	2.6	2.6	2.6
75°	15.8	13.2	10.5	7.9	7.9	2.6	2.6	2.6	2.6	2.6	2.6
77.5°	10.5	7.9	5.3	2.6	2.6	0.0	2.6	2.6	0.0	2.6	2.6
80°	5.3	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.6	2.6	2.6	2.6	2.6	0.0	2.6	0.0	2.6	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P238351

CATALOG NUMBER: PRS630D010-S6M24-61SWWH-4000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0
2.5°	1253.9	1253.9	1253.9	1253.9	1253.9	1253.9	1253.9	1251.3
5°	1227.6	1227.6	1227.6	1227.6	1224.9	1224.9	1224.9	1224.9
7.5°	1196.0	1193.3	1190.7	1190.7	1190.7	1188.1	1188.1	1190.7
10°	1153.8	1153.8	1151.2	1151.2	1148.5	1148.5	1148.5	1145.9
12.5°	1106.4	1103.8	1103.8	1098.5	1101.1	1098.5	1095.9	1098.5
15°	1053.7	1051.1	1048.4	1048.4	1048.4	1045.8	1045.8	1048.4
17.5°	998.4	993.1	990.5	993.1	987.8	987.8	987.8	985.2
20°	937.8	932.5	929.9	929.9	927.3	924.6	924.6	924.6
22.5°	874.6	871.9	866.7	866.7	864.0	864.0	861.4	861.4
25°	814.0	806.1	806.1	803.5	798.2	800.8	795.5	795.5
27.5°	745.5	742.9	742.9	740.2	735.0	732.3	729.7	732.3
30°	682.3	677.0	674.4	671.7	671.7	671.7	669.1	666.5
32.5°	619.1	613.8	608.5	608.5	608.5	603.2	603.2	603.2
35°	555.8	553.2	547.9	545.3	545.3	542.7	540.0	537.4
37.5°	495.2	490.0	487.3	482.1	482.1	476.8	474.2	476.8
40°	434.7	429.4	426.8	426.8	421.5	416.2	416.2	416.2
42.5°	379.3	371.4	371.4	366.2	360.9	358.3	353.0	355.6
45°	326.6	318.7	316.1	316.1	305.6	302.9	300.3	300.3
47.5°	274.0	271.3	266.1	260.8	252.9	245.0	242.4	242.4
50°	226.5	218.6	216.0	213.4	202.8	197.6	192.3	192.3
52.5°	181.8	173.9	168.6	166.0	158.1	150.2	147.5	144.9
55°	139.6	131.7	129.1	126.4	115.9	110.6	105.4	102.7
57.5°	102.7	97.5	92.2	86.9	79.0	73.8	68.5	65.9
60°	71.1	63.2	60.6	58.0	50.1	44.8	39.5	39.5
62.5°	44.8	36.9	34.2	31.6	26.3	21.1	21.1	21.1
65°	18.4	13.2	13.2	13.2	10.5	10.5	10.5	10.5
67.5°	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
70°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
72.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
75°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
77.5°	2.6	2.6	2.6	2.6	0.0	0.0	2.6	2.6
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)