

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: P238336

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P238336
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-25)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS630D010-S6M24-61SWWC-4000K
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" WALL WASH DISTRIBUTION, WW TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1945.2 lumens
Efficiency: N/A
Efficacy: 76.3 lumens/watt
Spacing Criteria (0/90/45): 0.98 / 0.94 / 1.03
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

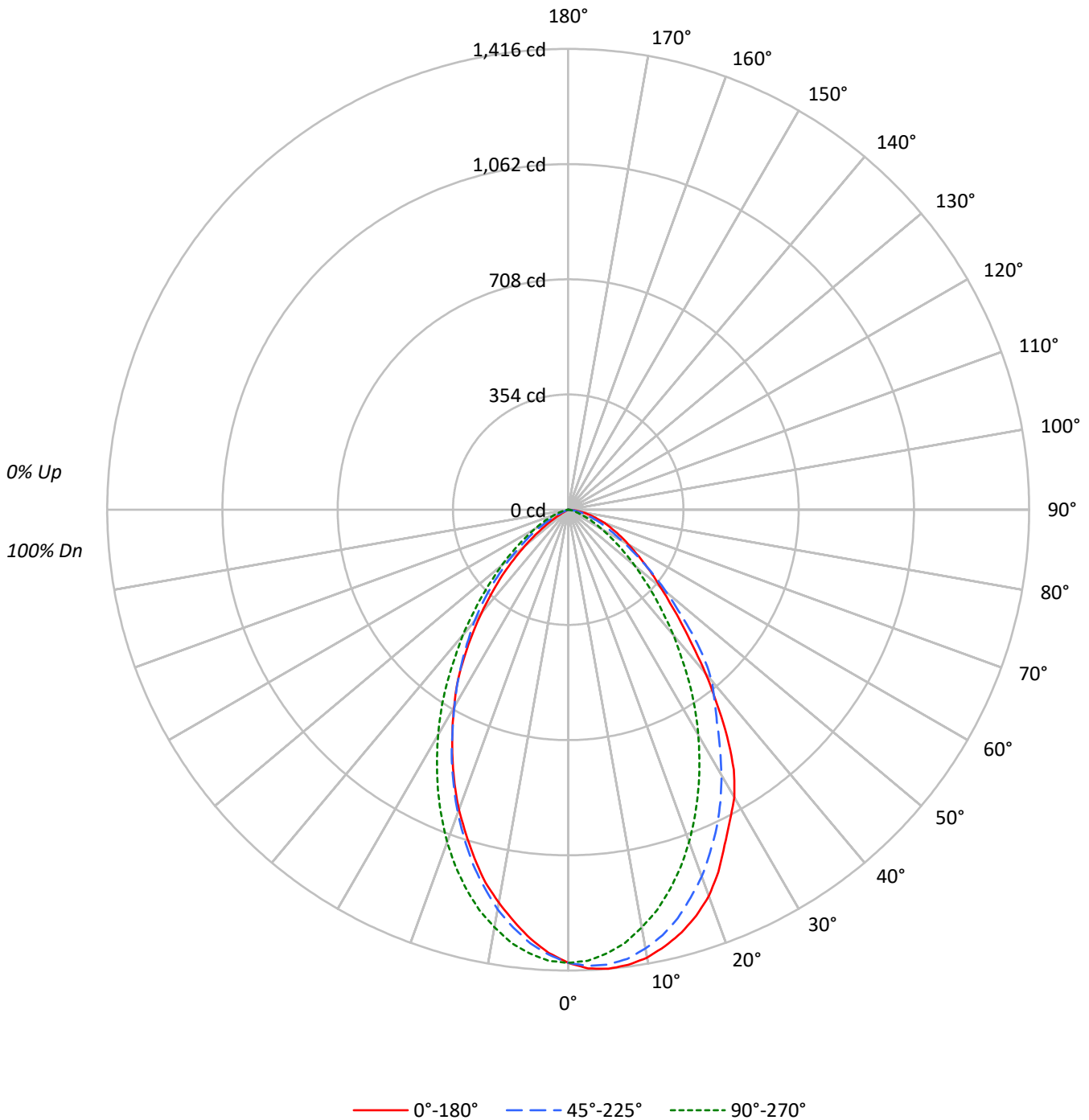
Input Watts (W): 25.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	102	100	98	98	96	95	95	93	92	90					90			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80					80			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71					71			
4	91	81	74	69	89	80	73	68	78	72	67	75	71	67	73	69	66	64					64			
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	60	58					58			
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52					52			
7	74	63	56	50	73	62	55	50	61	55	50	60	54	50	58	53	49	48					48			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44					44			
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40					40			
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37					37			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	59942	59942	59942
5°	61200	59147	57210
10°	61099	56949	53605
15°	59944	53833	49482
20°	57869	49778	44944
25°	53991	44970	39958
30°	50731	39723	34871
35°	44766	34096	29382
40°	36904	28305	23269
45°	29860	22639	17500
50°	24730	17837	11655
55°	21176	13654	6336
60°	18393	10221	1817
65°	16382	7519	0
70°	14943	4985	0
75°	12726	3078	0
80°	11108	1959	0
85°	7805	1284	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.8	6.6
10°-20°	340.2	17.5
20°-30°	441.9	22.7
30°-40°	424.8	21.8
40°-50°	312.6	16.1
50°-60°	179.5	9.2
60°-70°	81.3	4.2
70°-80°	30.3	1.6
80°-90°	5.8	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°	910.9	46.8
0°-40°	1335.7	68.7
0°-60°	1827.8	94.0
0°-90°	1945.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1945.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1392	1392	1392	1392	1392	
5°	1416	1403	1368	1337	1324	134
15°	1345	1300	1208	1129	1110	378
25°	1136	1078	947	846	841	524
35°	852	796	649	567	559	527
45°	490	538	372	332	287	383
55°	282	277	182	148	84	255
65°	161	129	74	32	0	161
75°	76	53	18	0	0	83
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°	1392.2	1392.2	1392.2	1392.2	1392.2	1392.2	1392.2	1392.2	1392.2	1392.2	1392.2
2.5°	1410.7	1410.7	1410.7	1408.1	1408.1	1410.7	1408.1	1408.1	1405.4	1405.4	1402.8
5°	1416.0	1416.0	1416.0	1416.0	1413.3	1413.3	1413.3	1410.7	1408.1	1405.4	1402.8
7.5°	1410.7	1410.7	1410.7	1410.7	1408.1	1408.1	1405.4	1402.8	1400.1	1394.9	1392.2
10°	1397.5	1397.5	1397.5	1394.9	1392.2	1389.6	1389.6	1384.3	1379.0	1373.8	1368.5
12.5°	1373.8	1373.8	1371.1	1371.1	1365.9	1365.9	1363.2	1358.0	1352.7	1347.4	1339.5
15°	1344.8	1342.1	1342.1	1339.5	1334.2	1331.6	1328.9	1321.0	1313.1	1305.2	1299.9
17.5°	1307.9	1305.2	1302.6	1299.9	1292.0	1286.8	1284.1	1276.2	1268.3	1260.4	1249.8
20°	1263.0	1260.4	1257.8	1252.5	1247.2	1241.9	1236.7	1228.8	1218.2	1207.7	1199.7
22.5°	1205.0	1202.4	1199.7	1197.1	1189.2	1183.9	1181.3	1173.4	1162.8	1152.3	1139.1
25°	1136.5	1136.5	1139.1	1131.2	1125.9	1120.6	1120.6	1112.7	1102.2	1089.0	1078.5
27.5°	1075.8	1075.8	1070.5	1065.3	1057.4	1052.1	1049.4	1041.5	1036.3	1025.7	1012.5
30°	1020.4	1017.8	1012.5	1007.3	999.3	991.4	983.5	973.0	962.4	951.9	941.3
32.5°	946.6	944.0	944.0	944.0	936.1	933.4	928.2	915.0	901.8	883.3	867.5
35°	851.7	849.1	846.4	849.1	854.3	857.0	859.6	854.3	841.1	820.0	796.3
37.5°	748.9	751.5	754.1	756.8	764.7	769.9	767.3	777.9	775.2	762.0	738.3
40°	656.6	656.6	659.2	667.1	675.0	677.7	680.3	690.8	690.8	693.5	685.6
42.5°	564.3	572.2	574.8	580.1	588.0	593.3	598.6	609.1	611.7	622.3	617.0
45°	490.4	495.7	501.0	506.3	514.2	519.5	522.1	530.0	537.9	543.2	537.9
47.5°	424.5	427.2	429.8	435.1	443.0	445.6	450.9	458.8	466.7	464.1	458.8
50°	369.2	371.8	371.8	379.7	385.0	387.6	387.6	398.2	398.2	398.2	392.9
52.5°	324.3	324.3	327.0	329.6	334.9	334.9	340.1	345.4	340.1	337.5	332.2
55°	282.1	282.1	284.8	287.4	287.4	290.0	292.7	292.7	287.4	282.1	276.9
57.5°	245.2	247.9	247.9	250.5	253.1	250.5	253.1	247.9	242.6	237.3	229.4
60°	213.6	216.2	216.2	218.9	218.9	218.9	216.2	210.9	203.0	197.8	189.8
62.5°	187.2	187.2	187.2	187.2	187.2	187.2	184.6	179.3	171.4	166.1	158.2
65°	160.8	160.8	160.8	160.8	158.2	158.2	155.6	150.3	142.4	137.1	129.2
67.5°	137.1	137.1	137.1	137.1	134.5	131.8	129.2	126.6	118.7	113.4	108.1
70°	118.7	116.0	116.0	113.4	110.7	108.1	108.1	102.8	97.6	92.3	87.0
72.5°	94.9	94.9	94.9	94.9	89.7	89.7	87.0	81.7	76.5	73.8	68.6
75°	76.5	76.5	76.5	73.8	71.2	71.2	68.6	65.9	60.6	58.0	52.7
77.5°	60.6	60.6	60.6	58.0	55.4	52.7	52.7	50.1	44.8	42.2	39.6
80°	44.8	44.8	42.2	39.6	39.6	36.9	36.9	34.3	31.6	29.0	26.4
82.5°	29.0	29.0	29.0	26.4	26.4	23.7	23.7	23.7	21.1	18.5	15.8
85°	15.8	15.8	15.8	13.2	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	5.3	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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1392.2	1392.2	1392.2	1392.2	1392.2	1392.2	1392.2	1392.2	1392.2	1392.2	1392.2
2.5°	1402.8	1400.1	1397.5	1397.5	1394.9	1394.9	1392.2	1389.6	1387.0	1387.0	1384.3
5°	1400.1	1397.5	1392.2	1389.6	1387.0	1384.3	1381.7	1376.4	1373.8	1368.5	1365.9
7.5°	1387.0	1381.7	1376.4	1371.1	1368.5	1365.9	1358.0	1352.7	1347.4	1342.1	1336.9
10°	1363.2	1358.0	1350.0	1344.8	1339.5	1334.2	1328.9	1318.4	1310.5	1302.6	1294.7
12.5°	1331.6	1323.7	1315.8	1305.2	1302.6	1297.3	1289.4	1278.8	1270.9	1260.4	1249.8
15°	1292.0	1278.8	1273.6	1260.4	1255.1	1249.8	1241.9	1231.4	1220.8	1207.7	1197.1
17.5°	1239.3	1226.1	1220.8	1207.7	1202.4	1197.1	1183.9	1173.4	1162.8	1149.6	1136.5
20°	1186.6	1176.0	1162.8	1149.6	1144.4	1139.1	1123.3	1112.7	1102.2	1086.4	1075.8
22.5°	1125.9	1112.7	1099.5	1089.0	1081.1	1075.8	1062.6	1049.4	1033.6	1017.8	1004.6
25°	1065.3	1049.4	1036.3	1023.1	1012.5	1007.3	991.4	975.6	959.8	946.6	930.8
27.5°	996.7	983.5	967.7	949.2	941.3	933.4	917.6	899.1	886.0	872.8	857.0
30°	925.5	912.3	893.9	878.1	870.1	862.2	846.4	830.6	817.4	799.0	783.1
32.5°	854.3	841.1	825.3	809.5	804.2	793.7	775.2	762.0	743.6	725.1	711.9
35°	785.8	775.2	759.4	740.9	727.8	717.2	698.8	677.7	661.8	648.7	635.5
37.5°	722.5	706.7	685.6	661.8	648.7	638.1	614.4	598.6	585.4	569.5	564.3
40°	656.6	630.2	606.5	582.7	572.2	559.0	540.5	524.7	514.2	503.6	490.4
42.5°	593.3	559.0	532.6	511.5	498.4	490.4	469.4	458.8	445.6	432.4	427.2
45°	522.1	495.7	464.1	443.0	432.4	424.5	406.1	392.9	379.7	371.8	363.9
47.5°	450.9	429.8	400.8	377.1	369.2	361.2	348.1	332.2	321.7	313.8	305.9
50°	379.7	363.9	348.1	321.7	313.8	311.1	295.3	282.1	271.6	266.3	258.4
52.5°	321.7	308.5	292.7	274.2	266.3	258.4	247.9	234.7	229.4	221.5	216.2
55°	266.3	253.1	245.2	232.0	221.5	216.2	205.7	197.8	189.8	181.9	176.7
57.5°	218.9	210.9	203.0	192.5	187.2	181.9	171.4	163.5	155.6	147.7	142.4
60°	181.9	174.0	166.1	158.2	152.9	150.3	139.8	131.8	123.9	118.7	113.4
62.5°	150.3	145.0	137.1	129.2	123.9	121.3	113.4	105.5	97.6	94.9	89.7
65°	123.9	118.7	110.7	102.8	102.8	97.6	89.7	84.4	79.1	73.8	68.6
67.5°	102.8	94.9	89.7	84.4	79.1	76.5	71.2	65.9	60.6	55.4	52.7
70°	81.7	76.5	71.2	63.3	60.6	58.0	52.7	47.5	44.8	39.6	36.9
72.5°	63.3	58.0	52.7	47.5	44.8	42.2	39.6	34.3	31.6	29.0	26.4
75°	50.1	44.8	39.6	34.3	34.3	31.6	29.0	23.7	21.1	18.5	18.5
77.5°	34.3	31.6	29.0	23.7	23.7	21.1	18.5	15.8	15.8	13.2	10.5
80°	23.7	21.1	18.5	15.8	13.2	13.2	10.5	10.5	7.9	7.9	5.3
82.5°	15.8	13.2	10.5	7.9	7.9	7.9	5.3	5.3	5.3	2.6	2.6
85°	7.9	5.3	5.3	2.6	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°	1392.2	1392.2	1392.2	1392.2	1392.2	1392.2	1392.2	1392.2	1392.2	1392.2	1392.2
2.5°	1381.7	1379.0	1376.4	1376.4	1376.4	1373.8	1371.1	1368.5	1368.5	1365.9	1365.9
5°	1360.6	1355.3	1352.7	1350.0	1350.0	1344.8	1342.1	1339.5	1336.9	1334.2	1331.6
7.5°	1328.9	1323.7	1318.4	1313.1	1313.1	1307.9	1302.6	1299.9	1294.7	1292.0	1289.4
10°	1289.4	1284.1	1276.2	1270.9	1265.7	1263.0	1255.1	1249.8	1247.2	1239.3	1236.7
12.5°	1239.3	1231.4	1223.5	1218.2	1215.6	1207.7	1199.7	1197.1	1189.2	1183.9	1181.3
15°	1186.6	1176.0	1165.5	1162.8	1157.6	1149.6	1141.7	1133.8	1128.6	1120.6	1120.6
17.5°	1125.9	1112.7	1104.8	1096.9	1094.3	1083.7	1073.2	1067.9	1060.0	1054.7	1052.1
20°	1060.0	1046.8	1036.3	1031.0	1023.1	1015.2	1004.6	999.3	991.4	986.2	983.5
22.5°	988.8	973.0	962.4	957.2	951.9	938.7	930.8	925.5	917.6	912.3	909.7
25°	915.0	904.4	891.2	883.3	878.1	864.9	857.0	851.7	846.4	841.1	838.5
27.5°	841.1	825.3	812.1	806.9	801.6	793.7	780.5	772.6	769.9	767.3	764.7
30°	767.3	754.1	740.9	733.0	725.1	717.2	709.3	701.4	698.8	693.5	688.2
32.5°	698.8	685.6	672.4	667.1	661.8	648.7	640.7	635.5	632.8	622.3	619.6
35°	627.6	617.0	609.1	603.8	601.2	590.6	585.4	572.2	566.9	561.6	559.0
37.5°	553.7	543.2	535.3	535.3	530.0	524.7	519.5	514.2	503.6	501.0	498.4
40°	482.5	474.6	469.4	464.1	464.1	461.4	456.2	456.2	448.3	443.0	435.1
42.5°	416.6	411.3	406.1	406.1	403.4	400.8	395.5	395.5	390.2	385.0	377.1
45°	356.0	348.1	345.4	345.4	342.8	340.1	337.5	337.5	332.2	327.0	321.7
47.5°	300.6	295.3	292.7	290.0	287.4	287.4	284.8	282.1	279.5	274.2	269.0
50°	253.1	247.9	245.2	242.6	242.6	239.9	237.3	232.0	232.0	224.1	218.9
52.5°	210.9	208.3	203.0	200.4	197.8	195.1	192.5	189.8	184.6	179.3	176.7
55°	171.4	166.1	163.5	160.8	158.2	155.6	152.9	150.3	147.7	139.8	134.5
57.5°	137.1	131.8	129.2	129.2	126.6	121.3	118.7	116.0	110.7	105.5	97.6
60°	108.1	105.5	100.2	100.2	97.6	92.3	89.7	84.4	79.1	71.2	65.9
62.5°	84.4	81.7	76.5	73.8	73.8	68.6	63.3	58.0	52.7	47.5	39.6
65°	63.3	60.6	58.0	55.4	52.7	47.5	42.2	36.9	31.6	23.7	15.8
67.5°	47.5	44.8	39.6	39.6	36.9	31.6	26.4	21.1	13.2	7.9	2.6
70°	34.3	31.6	26.4	23.7	23.7	18.5	13.2	7.9	0.0	0.0	0.0
72.5°	23.7	21.1	15.8	13.2	13.2	7.9	2.6	0.0	0.0	0.0	0.0
75°	15.8	13.2	7.9	7.9	5.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	7.9	5.3	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	2.6	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	0.0	0.0	0.0	2.6	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	0.0	0.0	0.0



TEST NUMBER: P238336

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

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1392.2	1392.2	1392.2	1392.2	1392.2	1392.2	1392.2	1392.2
2.5°	1365.9	1363.2	1363.2	1363.2	1360.6	1363.2	1363.2	1363.2
5°	1328.9	1328.9	1326.3	1326.3	1326.3	1323.7	1323.7	1323.7
7.5°	1284.1	1284.1	1281.5	1281.5	1281.5	1278.8	1276.2	1276.2
10°	1234.0	1234.0	1231.4	1231.4	1231.4	1228.8	1226.1	1226.1
12.5°	1176.0	1176.0	1176.0	1173.4	1173.4	1173.4	1170.7	1173.4
15°	1118.0	1115.4	1115.4	1112.7	1110.1	1110.1	1110.1	1110.1
17.5°	1049.4	1046.8	1046.8	1044.2	1046.8	1044.2	1044.2	1044.2
20°	978.3	978.3	978.3	978.3	978.3	978.3	980.9	980.9
22.5°	909.7	907.1	909.7	907.1	907.1	909.7	909.7	912.3
25°	838.5	835.9	835.9	838.5	838.5	838.5	841.1	841.1
27.5°	759.4	764.7	764.7	767.3	767.3	769.9	772.6	769.9
30°	690.8	690.8	690.8	693.5	696.1	698.8	701.4	701.4
32.5°	617.0	619.6	622.3	619.6	622.3	627.6	632.8	635.5
35°	556.4	551.1	548.5	548.5	551.1	553.7	556.4	559.0
37.5°	490.4	487.8	485.2	479.9	482.5	485.2	485.2	485.2
40°	429.8	424.5	421.9	419.3	416.6	414.0	414.0	414.0
42.5°	371.8	366.5	361.2	361.2	353.3	350.7	350.7	348.1
45°	316.4	311.1	305.9	305.9	298.0	290.0	287.4	287.4
47.5°	263.7	255.8	253.1	250.5	242.6	234.7	229.4	226.8
50°	213.6	205.7	203.0	200.4	192.5	181.9	176.7	174.0
52.5°	168.8	160.8	155.6	152.9	142.4	134.5	129.2	126.6
55°	126.6	121.3	116.0	113.4	102.8	92.3	84.4	84.4
57.5°	92.3	81.7	79.1	76.5	65.9	58.0	50.1	47.5
60°	60.6	50.1	47.5	44.8	34.3	26.4	23.7	21.1
62.5°	31.6	23.7	21.1	18.5	13.2	7.9	5.3	5.3
65°	10.5	2.6	2.6	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)