

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: P238358

Luminaire Tested: **PRS610D010-S6M12-61SWWMW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P238358
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-27)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS610D010-S6M12-61SWWMW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" WALL WASH DISTRIBUTION, WW TRIM MATTE WHITE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 737.0 lumens
Efficiency: N/A
Efficacy: 73.7 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.04 / 1.14
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

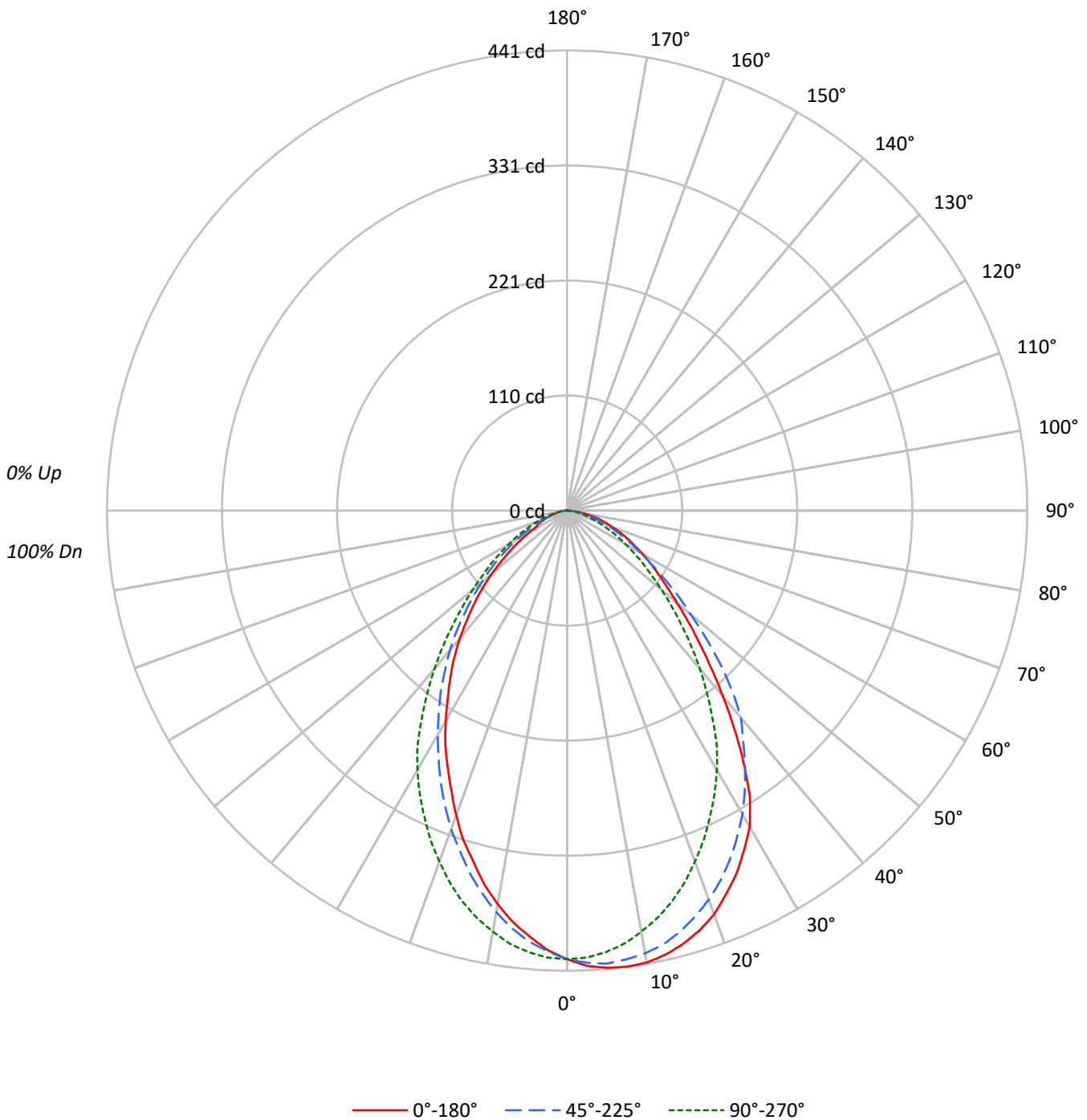
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77					77			
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70	68					68			
4	88	78	70	65	86	77	70	64	74	68	63	72	67	63	70	66	62	60					60			
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53					53			
6	76	65	57	51	75	64	56	51	62	56	51	61	55	50	59	54	50	48					48			
7	71	59	52	46	70	59	51	46	57	51	46	56	50	45	55	49	45	43					43			
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41	39					39			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36					36			
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33					33			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	18505	18505	18505
5°	19008	18360	17712
10°	19228	17916	16740
15°	19158	17290	15507
20°	18868	16399	14245
25°	18238	15387	12870
30°	17396	14264	11579
35°	15500	12767	10244
40°	13034	11123	8987
45°	10893	9432	7672
50°	9170	7904	6296
55°	8032	6681	4954
60°	7233	5597	3617
65°	6520	4585	3056
70°	5791	3777	2644
75°	5323	2994	2329
80°	4463	2232	1984
85°	3458	1482	1482



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.1	5.4
10°-20°	109.1	14.8
20°-30°	150.0	20.3
30°-40°	155.4	21.1
40°-50°	125.3	17.0
50°-60°	83.3	11.3
60°-70°	47.0	6.4
70°-80°	21.6	2.9
80°-90°	5.2	0.7
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°	299.2	40.6
0°-40°	454.6	61.7
0°-60°	663.2	90.0
0°-90°	737.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	737.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	430	430	430	430	430	
5°	440	436	425	415	410	42
15°	430	418	388	360	348	121
25°	384	369	324	287	271	176
35°	295	297	243	211	195	183
45°	179	207	155	139	126	139
55°	107	113	89	80	66	97
65°	64	59	45	36	30	64
75°	32	26	18	13	14	34
85°	7	5	3	4	3	8
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°	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8
2.5°	436.8	435.8	435.8	435.8	435.8	435.8	435.8	435.8	434.8	434.8	433.8
5°	439.8	439.8	439.8	439.8	438.8	438.8	438.8	437.8	436.8	435.8	435.8
7.5°	440.8	440.8	440.8	439.8	439.8	439.8	438.8	437.8	436.8	435.8	433.8
10°	439.8	439.8	438.8	438.8	437.8	436.8	436.8	435.8	434.8	432.8	430.8
12.5°	435.8	435.8	435.8	434.8	433.8	433.8	432.8	430.8	429.8	427.8	425.8
15°	429.8	429.8	429.8	428.8	427.8	426.8	426.8	424.8	422.8	420.8	417.8
17.5°	421.8	421.8	421.8	420.8	418.8	418.8	417.8	415.8	413.8	411.8	407.8
20°	411.8	410.8	410.8	409.8	407.8	407.8	406.8	404.8	402.8	399.8	396.8
22.5°	397.8	398.8	397.8	396.8	395.8	394.8	393.9	391.9	389.9	386.9	383.9
25°	383.9	382.9	382.9	382.9	381.9	379.9	378.9	377.9	374.9	371.9	368.9
27.5°	366.9	364.9	364.9	365.9	364.9	363.9	362.9	360.9	358.9	355.9	352.9
30°	349.9	348.9	348.9	347.9	345.9	344.9	344.9	342.9	341.9	338.9	335.9
32.5°	325.9	326.9	327.9	328.9	327.9	327.9	327.9	324.9	321.9	319.9	316.9
35°	294.9	295.9	297.9	299.9	303.9	304.9	305.9	306.9	303.9	300.9	296.9
37.5°	262.9	264.9	265.9	268.9	271.9	274.9	275.9	279.9	282.9	281.9	276.9
40°	231.9	232.9	235.9	236.9	241.9	244.9	246.9	250.9	256.9	258.9	258.9
42.5°	203.9	204.9	205.9	208.9	212.9	216.9	217.9	221.9	228.9	231.9	233.9
45°	178.9	179.9	181.9	182.9	186.9	188.9	190.9	196.9	200.9	205.9	206.9
47.5°	156.9	156.9	157.9	160.9	163.9	165.9	166.9	171.9	175.9	178.9	179.9
50°	136.9	137.9	138.9	139.9	141.9	143.9	145.9	149.9	152.9	154.9	153.9
52.5°	121.0	122.0	122.0	123.0	125.0	127.0	128.0	130.0	131.9	132.9	133.9
55°	107.0	107.0	108.0	109.0	110.0	111.0	111.0	113.0	113.0	114.0	113.0
57.5°	95.0	95.0	95.0	96.0	96.0	97.0	97.0	97.0	97.0	97.0	96.0
60°	84.0	83.0	84.0	84.0	85.0	85.0	85.0	84.0	83.0	83.0	82.0
62.5°	73.0	73.0	73.0	74.0	74.0	73.0	73.0	73.0	71.0	71.0	70.0
65°	64.0	63.0	64.0	64.0	64.0	63.0	63.0	62.0	61.0	60.0	59.0
67.5°	55.0	55.0	55.0	55.0	54.0	54.0	54.0	52.0	51.0	50.0	49.0
70°	46.0	47.0	46.0	46.0	46.0	45.0	45.0	44.0	43.0	42.0	41.0
72.5°	39.0	39.0	39.0	38.0	38.0	37.0	37.0	36.0	35.0	34.0	33.0
75°	32.0	32.0	32.0	31.0	30.0	30.0	30.0	29.0	28.0	27.0	26.0
77.5°	25.0	25.0	24.0	24.0	23.0	23.0	23.0	22.0	21.0	20.0	20.0
80°	18.0	18.0	18.0	18.0	17.0	17.0	17.0	16.0	15.0	15.0	14.0
82.5°	12.0	13.0	12.0	12.0	11.0	11.0	11.0	11.0	10.0	10.0	10.0
85°	7.0	7.0	7.0	7.0	6.0	7.0	6.0	6.0	6.0	6.0	5.0
87.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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°	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8
2.5°	433.8	432.8	432.8	431.8	431.8	430.8	430.8	429.8	429.8	428.8	427.8
5°	433.8	432.8	431.8	431.8	430.8	429.8	428.8	427.8	425.8	424.8	423.8
7.5°	432.8	431.8	429.8	427.8	426.8	425.8	424.8	422.8	420.8	418.8	416.8
10°	429.8	427.8	424.8	422.8	421.8	419.8	417.8	415.8	412.8	409.8	407.8
12.5°	423.8	420.8	417.8	414.8	413.8	411.8	408.8	405.8	402.8	399.8	396.8
15°	414.8	411.8	408.8	405.8	403.8	402.8	398.8	394.8	391.9	387.9	383.9
17.5°	404.8	401.8	397.8	393.9	391.9	389.9	386.9	381.9	378.9	373.9	370.9
20°	393.9	389.9	384.9	380.9	378.9	376.9	371.9	367.9	362.9	357.9	354.9
22.5°	379.9	374.9	370.9	366.9	363.9	361.9	356.9	351.9	346.9	341.9	336.9
25°	363.9	359.9	354.9	350.9	347.9	344.9	339.9	334.9	328.9	323.9	318.9
27.5°	348.9	343.9	338.9	332.9	330.9	326.9	321.9	316.9	310.9	305.9	299.9
30°	330.9	325.9	319.9	314.9	312.9	309.9	303.9	297.9	292.9	286.9	281.9
32.5°	312.9	307.9	302.9	296.9	293.9	289.9	283.9	277.9	271.9	266.9	260.9
35°	293.9	288.9	282.9	276.9	272.9	268.9	261.9	254.9	248.9	242.9	239.9
37.5°	273.9	267.9	261.9	252.9	248.9	244.9	237.9	231.9	225.9	219.9	216.9
40°	251.9	244.9	237.9	229.9	225.9	220.9	214.9	208.9	202.9	197.9	193.9
42.5°	229.9	220.9	213.9	204.9	201.9	197.9	191.9	184.9	179.9	175.9	171.9
45°	204.9	198.9	190.9	182.9	178.9	175.9	169.9	163.9	158.9	154.9	151.9
47.5°	178.9	175.9	167.9	159.9	157.9	153.9	147.9	142.9	138.9	135.9	132.9
50°	154.9	152.9	147.9	139.9	136.9	133.9	129.0	125.0	121.0	118.0	116.0
52.5°	132.9	131.0	128.0	122.0	119.0	116.0	112.0	108.0	105.0	102.0	101.0
55°	113.0	111.0	108.0	104.0	102.0	99.0	96.0	93.0	90.0	89.0	87.0
57.5°	96.0	93.0	91.0	88.0	87.0	85.0	82.0	80.0	78.0	76.0	74.0
60°	81.0	79.0	77.0	75.0	74.0	73.0	70.0	68.0	66.0	65.0	63.0
62.5°	69.0	67.0	65.0	63.0	62.0	61.0	59.0	57.0	55.0	55.0	53.0
65°	58.0	56.0	55.0	53.0	52.0	51.0	49.0	48.0	46.0	45.0	44.0
67.5°	48.0	47.0	46.0	43.0	43.0	42.0	40.0	39.0	38.0	37.0	36.0
70°	39.0	38.0	37.0	36.0	35.0	34.0	33.0	32.0	30.0	30.0	29.0
72.5°	32.0	31.0	29.0	28.0	28.0	27.0	26.0	25.0	24.0	23.0	23.0
75°	25.0	24.0	23.0	22.0	21.0	21.0	20.0	19.0	19.0	18.0	17.0
77.5°	19.0	18.0	17.0	16.0	16.0	15.0	15.0	14.0	14.0	13.0	13.0
80°	13.0	13.0	12.0	12.0	11.0	11.0	10.0	10.0	10.0	9.0	9.0
82.5°	9.0	8.0	8.0	8.0	7.0	7.0	7.0	7.0	6.0	6.0	6.0
85°	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0
87.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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°	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8
2.5°	427.8	426.8	425.8	425.8	425.8	424.8	424.8	423.8	422.8	422.8	421.8
5°	421.8	420.8	419.8	418.8	418.8	416.8	416.8	415.8	414.8	413.8	412.8
7.5°	414.8	412.8	411.8	409.8	409.8	408.8	405.8	404.8	403.8	401.8	400.8
10°	405.8	402.8	400.8	399.8	397.8	396.8	393.9	392.9	390.9	389.9	387.9
12.5°	393.9	390.9	387.9	386.9	385.9	382.9	380.9	377.9	375.9	373.9	371.9
15°	380.9	377.9	373.9	372.9	371.9	367.9	364.9	362.9	359.9	357.9	355.9
17.5°	365.9	361.9	357.9	356.9	354.9	350.9	348.9	345.9	341.9	339.9	337.9
20°	349.9	345.9	341.9	340.9	338.9	334.9	330.9	327.9	324.9	322.9	319.9
22.5°	331.9	327.9	322.9	320.9	319.9	314.9	311.9	308.9	305.9	301.9	299.9
25°	314.9	309.9	305.9	302.9	300.9	296.9	293.9	288.9	286.9	282.9	280.9
27.5°	295.9	290.9	286.9	283.9	281.9	278.9	273.9	269.9	266.9	263.9	261.9
30°	276.9	271.9	267.9	264.9	262.9	258.9	253.9	251.9	247.9	244.9	241.9
32.5°	256.9	251.9	246.9	245.9	242.9	238.9	235.9	231.9	228.9	225.9	222.9
35°	233.9	230.9	226.9	225.9	223.9	219.9	216.9	213.9	210.9	206.9	203.9
37.5°	211.9	207.9	205.9	203.9	202.9	200.9	197.9	194.9	191.9	188.9	187.9
40°	189.9	186.9	183.9	183.9	182.9	180.9	178.9	176.9	174.9	171.9	169.9
42.5°	168.9	165.9	164.9	162.9	161.9	160.9	158.9	157.9	156.9	154.9	152.9
45°	148.9	146.9	144.9	143.9	142.9	141.9	141.9	139.9	138.9	137.9	135.9
47.5°	130.0	129.0	128.0	127.0	126.0	126.0	124.0	123.0	122.0	122.0	120.0
50°	114.0	113.0	112.0	111.0	110.0	110.0	109.0	108.0	107.0	106.0	104.0
52.5°	100.0	99.0	97.0	97.0	97.0	96.0	95.0	94.0	93.0	92.0	91.0
55°	86.0	85.0	84.0	84.0	83.0	83.0	82.0	81.0	80.0	79.0	78.0
57.5°	74.0	73.0	72.0	72.0	71.0	71.0	70.0	69.0	67.0	66.0	65.0
60°	63.0	62.0	61.0	61.0	60.0	59.0	59.0	57.0	56.0	55.0	53.0
62.5°	52.0	51.0	51.0	50.0	50.0	50.0	49.0	47.0	46.0	44.0	43.0
65°	43.0	42.0	42.0	41.0	41.0	40.0	39.0	38.0	36.0	35.0	33.0
67.5°	35.0	35.0	34.0	33.0	33.0	32.0	31.0	29.0	28.0	26.0	25.0
70°	28.0	27.0	27.0	26.0	25.0	24.0	23.0	22.0	21.0	21.0	21.0
72.5°	22.0	21.0	21.0	20.0	20.0	18.0	17.0	17.0	17.0	17.0	17.0
75°	17.0	16.0	15.0	15.0	14.0	14.0	13.0	13.0	13.0	13.0	14.0
77.5°	12.0	12.0	11.0	11.0	10.0	10.0	10.0	10.0	10.0	10.0	11.0
80°	9.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
82.5°	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	6.0
85°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0
87.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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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CATALOG NUMBER: PRS610D010-S6M12-61SWWMW

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8
2.5°	421.8	421.8	421.8	421.8	421.8	420.8	421.8	421.8
5°	412.8	411.8	411.8	410.8	410.8	410.8	410.8	409.8
7.5°	399.8	398.8	398.8	398.8	397.8	397.8	396.8	397.8
10°	385.9	384.9	383.9	384.9	382.9	382.9	382.9	382.9
12.5°	370.9	369.9	368.9	367.9	367.9	366.9	366.9	366.9
15°	353.9	352.9	351.9	350.9	350.9	348.9	348.9	347.9
17.5°	335.9	334.9	333.9	332.9	330.9	330.9	329.9	330.9
20°	316.9	314.9	313.9	313.9	312.9	311.9	310.9	310.9
22.5°	297.9	295.9	295.9	293.9	292.9	291.9	290.9	289.9
25°	277.9	275.9	275.9	273.9	272.9	271.9	271.9	270.9
27.5°	258.9	255.9	255.9	254.9	252.9	251.9	251.9	252.9
30°	239.9	237.9	236.9	234.9	233.9	232.9	231.9	232.9
32.5°	220.9	217.9	216.9	216.9	215.9	214.9	213.9	212.9
35°	201.9	200.9	198.9	197.9	195.9	195.9	194.9	194.9
37.5°	184.9	181.9	180.9	179.9	178.9	177.9	176.9	177.9
40°	166.9	164.9	162.9	162.9	160.9	159.9	158.9	159.9
42.5°	150.9	148.9	147.9	145.9	143.9	142.9	142.9	141.9
45°	134.9	131.9	131.9	129.0	128.0	127.0	126.0	126.0
47.5°	119.0	117.0	115.0	115.0	112.0	111.0	110.0	110.0
50°	104.0	101.0	100.0	99.0	97.0	95.0	94.0	94.0
52.5°	89.0	87.0	85.0	85.0	83.0	81.0	80.0	79.0
55°	76.0	74.0	73.0	71.0	70.0	67.0	66.0	66.0
57.5°	63.0	61.0	60.0	59.0	57.0	55.0	53.0	53.0
60°	52.0	50.0	50.0	48.0	46.0	44.0	42.0	42.0
62.5°	41.0	39.0	39.0	38.0	36.0	35.0	34.0	33.0
65°	32.0	30.0	30.0	30.0	30.0	30.0	29.0	30.0
67.5°	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
70°	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
72.5°	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
75°	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
77.5°	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
80°	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
82.5°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
85°	3.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0
87.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)