

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: SHAPER

Report Number: 19151

Luminaire Tested: **608-38-F2/25**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 19151
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 608-38-F2/25
Description: INTERIOR WALL MOUNT LUMINAIRE WITH WHITE INTERIOR AND WHITE PLASTIC LENS
Light Source: TWO 25 WATT T8 LAMPS

FO25/830/XP/ECO. LUMEN RATING = 2175 LMS.

Ballast/Driver: -

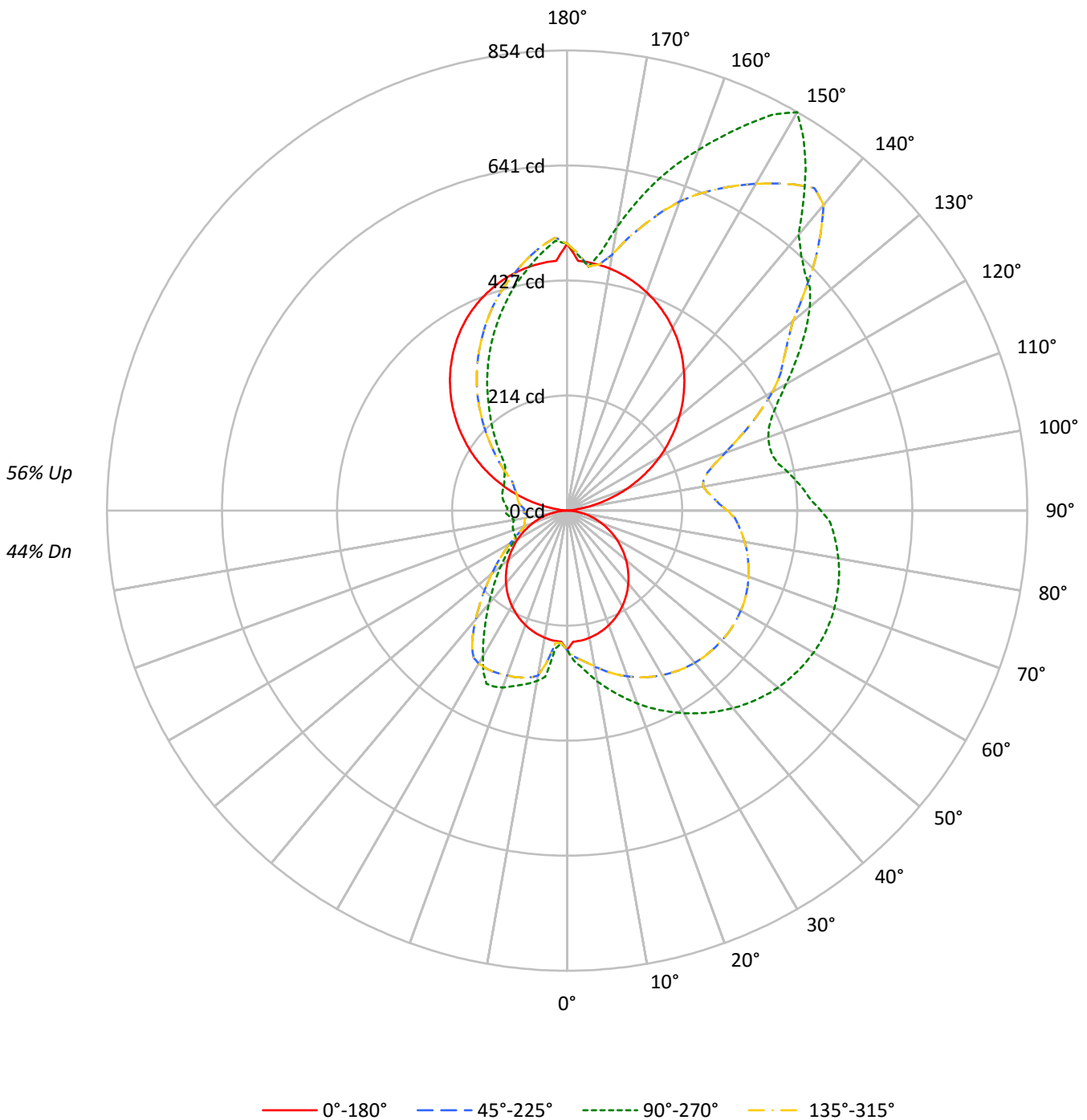
Summary

Lumens per Lamp: 2175 (2 lamps)
Luminaire Lumens: 3458.1 lumens
Efficiency: 79.5%
Efficacy: 84.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.92 / 1.79
Luminous Opening: Rectangular w/ Sides (W: 0.35' x L: 3.19' x H: 0.62')
CIE Type: General Diffuse

Input Watts (W): 41
Input Voltage (V): NR
Input Current (A_{in}): 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	0	
RCR																						
0	84	84	84	84	77	77	77	77	64	64	64	52	52	52	41	41	41	35				
1	75	70	66	63	68	64	61	58	53	50	48	42	40	39	32	31	30	25				
2	67	60	55	50	61	55	50	46	45	41	38	36	33	31	27	25	24	20				
3	61	52	46	41	55	48	42	37	39	35	31	31	28	25	24	21	19	16				
4	55	46	39	34	50	42	36	31	34	30	26	27	24	21	21	18	16	13				
5	50	41	34	28	46	37	31	26	30	26	22	24	21	18	18	16	14	11				
6	46	36	29	24	42	33	27	22	27	22	19	22	18	15	17	14	12	9				
7	43	32	26	21	39	30	24	19	24	20	16	20	16	13	15	12	10	8				
8	40	29	23	18	36	27	21	17	22	18	14	18	14	12	14	11	9	7				
9	37	27	20	16	33	24	19	15	20	16	13	16	13	10	13	10	8	6				
10	34	24	18	14	31	22	17	13	19	14	11	15	12	9	12	9	7	6				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	2492	2492	2492	2492
5°	2311	2435	2311	2159
10°	2268	2400	2268	2396
15°	2220	2378	2220	2269
20°	2167	2377	2167	2180
25°	2112	2381	2112	2065
30°	2050	2391	2050	1721
35°	1983	2405	1983	1402
40°	1909	2423	1909	1141
45°	1826	2443	1826	939
50°	1737	2464	1737	775
55°	1638	2481	1638	643
60°	1528	2502	1528	537
65°	1398	2520	1398	509
70°	1240	2537	1240	512
75°	1051	2552	1051	509
80°	798	2568	798	505
85°	426	2586	426	567



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	26.2	0.8	0.6
10°-20°	87.1	2.5	2.0
20°-30°	148.7	4.3	3.4
30°-40°	194.5	5.6	4.5
40°-50°	219.6	6.4	5.0
50°-60°	227.3	6.6	5.2
60°-70°	221.9	6.4	5.1
70°-80°	212.5	6.1	4.9
80°-90°	198.5	5.7	4.6
90°-100°	181.0	5.2	4.2
100°-110°	193.0	5.6	4.4
110°-120°	236.4	6.8	5.4
120°-130°	287.1	8.3	6.6
130°-140°	308.4	8.9	7.1
140°-150°	299.6	8.7	6.9
150°-160°	232.3	6.7	5.3
160°-170°	138.7	4.0	3.2
170°-180°	45.5	1.3	1.0
0°-30°	262.0	7.6	6.0
0°-40°	456.4	13.2	10.5
0°-60°	903.3	26.1	20.8
0°-90°	1536.2	44.4	35.3
90°-120°	610.4	17.7	14.0
90°-150°	1505.5	43.5	34.6
90°-180°	1922.0	55.6	44.2
0°-180°	3458.1	100.0	79.5

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	258	258	258	258	258	
5°	243	291	243	258	243	23
15°	234	351	234	335	234	66
25°	216	409	216	354	216	100
35°	191	458	191	267	191	120
45°	160	496	160	191	160	123
55°	124	521	124	135	124	111
65°	87	530	87	107	87	86
75°	49	521	49	104	49	51
85°	12	497	12	109	12	14
90°	1	471	1	112	1	1
95°	9	441	9	115	9	13
105°	76	394	76	125	76	80
115°	158	420	158	129	158	156
125°	236	529	236	140	236	210
135°	306	624	306	189	306	236
145°	366	772	366	256	366	229
155°	413	791	413	335	413	190
165°	446	631	446	414	446	126
175°	462	454	462	485	462	44
180°	495	495	495	495	495	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	258.5	258.5	258.5	258.5	258.5	258.5	258.5	258.5	258.5	258.5	258.5
2.5°	243.8	261.7	270.5	276.6	278.2	276.6	270.5	261.7	243.8	246.3	245.9
5°	242.9	265.4	277.5	286.2	290.6	286.2	277.5	265.4	242.9	239.3	246.1
7.5°	241.7	268.1	284.7	300.3	305.7	300.3	284.7	268.1	241.7	247.2	281.7
10°	239.6	270.3	294.0	314.0	321.8	314.0	294.0	270.3	239.6	265.2	311.1
12.5°	237.0	270.7	302.7	327.7	336.6	327.7	302.7	270.7	237.0	286.1	317.2
15°	234.0	272.0	311.7	340.4	351.3	340.4	311.7	272.0	234.0	302.7	320.9
17.5°	230.3	273.4	319.8	353.7	366.3	353.7	319.8	273.4	230.3	305.4	323.8
20°	226.2	274.5	327.5	366.3	381.0	366.3	327.5	274.5	226.2	305.2	325.7
22.5°	221.7	275.5	334.6	378.6	395.0	378.6	334.6	275.5	221.7	303.5	327.3
25°	216.5	275.5	341.3	390.5	408.7	390.5	341.3	275.5	216.5	300.9	329.2
27.5°	210.6	275.0	347.2	401.4	421.4	401.4	347.2	275.0	210.6	297.7	329.2
30°	204.8	273.8	352.7	411.7	434.4	411.7	352.7	273.8	204.8	293.5	327.9
32.5°	198.3	272.3	357.5	422.1	446.1	422.1	357.5	272.3	198.3	288.9	323.4
35°	191.4	270.2	361.8	431.7	457.9	431.7	361.8	270.2	191.4	283.8	307.8
37.5°	184.1	267.6	365.5	440.3	468.2	440.3	365.5	267.6	184.1	278.8	286.6
40°	176.4	264.3	368.7	448.6	478.8	448.6	368.7	264.3	176.4	272.9	263.8
42.5°	168.3	260.9	371.2	456.0	487.8	456.0	371.2	260.9	168.3	266.0	242.0
45°	160.0	256.6	372.8	462.8	496.5	462.8	372.8	256.6	160.0	258.3	221.4
47.5°	151.4	252.0	374.0	468.9	504.3	468.9	374.0	252.0	151.4	249.2	201.3
50°	142.6	247.2	374.9	473.8	511.1	473.8	374.9	247.2	142.6	236.3	182.7
52.5°	133.6	241.6	375.3	478.0	516.5	478.0	375.3	241.6	133.6	218.4	166.0
55°	124.5	236.1	374.8	481.1	521.0	481.1	374.8	236.1	124.5	196.8	150.2
57.5°	115.1	230.3	373.7	483.6	524.8	483.6	373.7	230.3	115.1	175.3	135.8
60°	105.9	223.9	372.0	485.4	528.0	485.4	372.0	223.9	105.9	154.3	122.6
62.5°	96.3	217.6	369.9	485.7	529.7	485.7	369.9	217.6	96.3	134.7	110.2
65°	86.8	210.9	366.6	485.4	530.2	485.4	366.6	210.9	86.8	116.6	99.4
67.5°	77.1	204.1	363.0	484.0	529.6	484.0	363.0	204.1	77.1	100.3	89.7
70°	67.5	197.0	358.3	481.3	528.0	481.3	358.3	197.0	67.5	85.8	83.5
72.5°	58.1	190.1	353.1	477.9	525.0	477.9	353.1	190.1	58.1	73.0	82.5
75°	48.7	182.8	347.4	473.7	521.4	473.7	347.4	182.8	48.7	61.9	81.6
77.5°	39.5	175.4	341.5	468.7	517.3	468.7	341.5	175.4	39.5	52.9	80.5
80°	30.2	168.0	334.5	462.5	510.9	462.5	334.5	168.0	30.2	47.7	78.8
82.5°	21.3	160.3	327.1	455.5	504.4	455.5	327.1	160.3	21.3	46.0	76.6
85°	12.4	152.9	319.3	447.9	496.8	447.9	319.3	152.9	12.4	44.4	76.6
87.5°	4.3	145.7	311.2	439.4	488.3	439.4	311.2	145.7	4.3	42.8	80.7
90°	0.6	135.7	297.2	422.9	470.9	422.9	297.2	135.7	0.6	40.4	80.1
92.5°	2.9	125.4	282.4	405.4	452.7	405.4	282.4	125.4	2.9	41.8	80.1
95°	9.3	120.5	272.3	394.3	441.0	394.3	272.3	120.5	9.3	47.1	84.7
97.5°	20.2	129.1	262.5	382.3	428.3	382.3	262.5	129.1	20.2	51.6	88.5
100°	35.4	149.2	256.0	369.9	415.3	369.9	256.0	149.2	35.4	54.6	91.7
102.5°	55.1	175.7	259.1	358.5	401.4	358.5	259.1	175.7	55.1	59.5	94.2
105°	75.8	208.0	269.0	356.7	394.5	356.7	269.0	208.0	75.8	65.1	95.3
107.5°	96.6	240.6	286.7	359.5	393.6	359.5	286.7	240.6	96.6	72.5	97.7
110°	117.3	270.5	311.1	367.5	397.0	367.5	311.1	270.5	117.3	84.7	101.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	137.7	299.5	340.2	381.5	405.5	381.5	340.2	299.5	137.7	99.0	105.5
115°	158.0	337.3	373.5	402.5	420.4	402.5	373.5	337.3	158.0	114.4	109.6
117.5°	178.0	386.0	406.7	428.8	441.8	428.8	406.7	386.0	178.0	131.1	114.2
120°	197.7	435.2	439.8	459.2	468.8	459.2	439.8	435.2	197.7	149.6	124.8
122.5°	217.0	481.9	468.7	490.6	498.5	490.6	468.7	481.9	217.0	168.5	137.6
125°	235.7	511.1	490.6	522.2	529.3	522.2	490.6	511.1	235.7	187.5	151.7
127.5°	253.9	523.4	515.5	551.5	559.7	551.5	515.5	523.4	253.9	206.6	166.6
130°	271.7	530.5	547.0	577.2	588.0	577.2	547.0	530.5	271.7	226.5	182.2
132.5°	289.2	536.0	596.1	592.5	611.7	592.5	596.1	536.0	289.2	245.6	198.6
135°	305.8	539.7	648.6	612.3	623.8	612.3	648.6	539.7	305.8	265.1	216.7
137.5°	322.0	542.2	696.0	638.1	642.9	638.1	696.0	542.2	322.0	284.7	235.6
140°	337.4	543.7	740.3	687.7	668.1	687.7	740.3	543.7	337.4	303.8	254.5
142.5°	352.0	543.8	754.3	739.7	719.5	739.7	754.3	543.8	352.0	322.5	273.4
145°	366.0	541.4	738.5	786.3	771.6	786.3	738.5	541.4	366.0	340.8	292.4
147.5°	379.2	536.3	719.8	826.4	817.1	826.4	719.8	536.3	379.2	359.1	311.4
150°	391.4	529.1	700.1	820.5	853.7	820.5	700.1	529.1	391.4	376.0	330.4
152.5°	402.8	520.8	679.8	788.8	829.0	788.8	679.8	520.8	402.8	392.5	348.4
155°	413.1	510.7	658.0	753.9	790.7	753.9	658.0	510.7	413.1	407.3	366.9
157.5°	422.6	499.7	635.9	719.2	751.6	719.2	635.9	499.7	422.6	422.8	385.2
160°	431.1	487.3	610.2	684.5	712.5	684.5	610.2	487.3	431.1	438.3	403.0
162.5°	438.8	473.9	580.4	649.7	673.2	649.7	580.4	473.9	438.8	452.8	420.1
165°	445.7	463.7	548.2	608.1	630.6	608.1	548.2	463.7	445.7	466.2	435.8
167.5°	451.4	455.7	516.7	564.9	583.2	564.9	516.7	455.7	451.4	478.7	451.0
170°	456.1	451.5	482.4	519.4	534.7	519.4	482.4	451.5	456.1	489.6	467.0
172.5°	459.8	454.7	460.7	475.7	483.1	475.7	460.7	454.7	459.8	499.2	482.0
175°	462.5	466.6	454.8	452.6	453.9	452.6	454.8	466.6	462.5	506.2	495.4
177.5°	463.8	480.7	477.1	475.4	474.2	475.4	477.1	480.7	463.8	505.1	506.9
180°	495.2	495.2	495.2	495.2	495.2	495.2	495.2	495.2	495.2	495.2	495.2



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	258.5	258.5	258.5	258.5	258.5	258.5
2.5°	246.3	246.6	246.3	245.9	246.3	243.8
5°	254.3	257.7	254.3	246.1	239.3	242.9
7.5°	306.0	311.2	306.0	281.7	247.2	241.7
10°	318.9	321.2	318.9	311.1	265.2	239.6
12.5°	326.1	328.6	326.1	317.2	286.1	237.0
15°	331.2	335.3	331.2	320.9	302.7	234.0
17.5°	336.7	342.1	336.7	323.8	305.4	230.3
20°	343.4	349.5	343.4	325.7	305.2	226.2
22.5°	347.6	353.8	347.6	327.3	303.5	221.7
25°	349.7	354.5	349.7	329.2	300.9	216.5
27.5°	343.4	336.7	343.4	329.2	297.7	210.6
30°	322.9	312.7	322.9	327.9	293.5	204.8
32.5°	299.5	289.3	299.5	323.4	288.9	198.3
35°	276.3	266.8	276.3	307.8	283.8	191.4
37.5°	254.5	245.5	254.5	286.6	278.8	184.1
40°	233.8	225.5	233.8	263.8	272.9	176.4
42.5°	214.6	207.4	214.6	242.0	266.0	168.3
45°	196.6	190.9	196.6	221.4	258.3	160.0
47.5°	180.4	175.5	180.4	201.3	249.2	151.4
50°	165.2	160.7	165.2	182.7	236.3	142.6
52.5°	151.1	147.1	151.1	166.0	218.4	133.6
55°	137.9	135.1	137.9	150.2	196.8	124.5
57.5°	125.9	123.5	125.9	135.8	175.3	115.1
60°	115.0	113.3	115.0	122.6	154.3	105.9
62.5°	105.5	107.5	105.5	110.2	134.7	96.3
65°	101.6	107.1	101.6	99.4	116.6	86.8
67.5°	101.4	107.2	101.4	89.7	100.3	77.1
70°	100.9	106.5	100.9	83.5	85.8	67.5
72.5°	100.1	105.7	100.1	82.5	73.0	58.1
75°	98.6	104.1	98.6	81.6	61.9	48.7
77.5°	97.1	102.5	97.1	80.5	52.9	39.5
80°	95.1	100.4	95.1	78.8	47.7	30.2
82.5°	95.5	103.7	95.5	76.6	46.0	21.3
85°	100.6	109.0	100.6	76.6	44.4	12.4
87.5°	105.6	113.9	105.6	80.7	42.8	4.3
90°	104.0	112.1	104.0	80.1	40.4	0.6
92.5°	102.8	110.8	102.8	80.1	41.8	2.9
95°	107.0	115.0	107.0	84.7	47.1	9.3
97.5°	110.3	118.1	110.3	88.5	51.6	20.2
100°	113.2	121.2	113.2	91.7	54.6	35.4
102.5°	115.5	123.1	115.5	94.2	59.5	55.1
105°	117.2	124.6	117.2	95.3	65.1	75.8
107.5°	117.6	125.4	117.6	97.7	72.5	96.6
110°	118.3	125.3	118.3	101.5	84.7	117.3



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	120.6	126.5	120.6	105.5	99.0	137.7
115°	123.2	128.6	123.2	109.6	114.4	158.0
117.5°	126.3	131.2	126.3	114.2	131.1	178.0
120°	129.7	134.2	129.7	124.8	149.6	197.7
122.5°	133.2	137.0	133.2	137.6	168.5	217.0
125°	139.0	140.1	139.0	151.7	187.5	235.7
127.5°	151.4	147.5	151.4	166.6	206.6	253.9
130°	164.8	159.9	164.8	182.2	226.5	271.7
132.5°	179.2	173.6	179.2	198.6	245.6	289.2
135°	194.6	188.7	194.6	216.7	265.1	305.8
137.5°	210.8	204.1	210.8	235.6	284.7	322.0
140°	227.1	220.3	227.1	254.5	303.8	337.4
142.5°	245.9	237.5	245.9	273.4	322.5	352.0
145°	265.3	256.5	265.3	292.4	340.8	366.0
147.5°	284.9	276.0	284.9	311.4	359.1	379.2
150°	304.9	295.9	304.9	330.4	376.0	391.4
152.5°	323.8	315.8	323.8	348.4	392.5	402.8
155°	343.4	335.4	343.4	366.9	407.3	413.1
157.5°	362.6	355.6	362.6	385.2	422.8	422.6
160°	382.1	374.7	382.1	403.0	438.3	431.1
162.5°	400.8	394.5	400.8	420.1	452.8	438.8
165°	419.6	414.0	419.6	435.8	466.2	445.7
167.5°	437.1	432.5	437.1	451.0	478.7	451.4
170°	453.0	449.4	453.0	467.0	489.6	456.1
172.5°	470.8	467.6	470.8	482.0	499.2	459.8
175°	487.4	484.8	487.4	495.4	506.2	462.5
177.5°	502.2	501.1	502.2	506.9	505.1	463.8
180°	495.2	495.2	495.2	495.2	495.2	495.2

(END OF REPORT)