

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: McGRAW-EDISON

Report Number: P197534

Luminaire Tested: **TT-C1-LED-E1-CQ-MS/DIM**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P197534
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P115423)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TT-C1-LED-E1-CQ-MS/DIM
Description: TOPTIER LED PARKING GARAGE LUMINAIRE
CONCENTRATED DISTRIBUTION WITH DIMMING OCCUPANCY SENSOR
Light Source: (168) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3891.5 lumens
Efficiency: N/A
Efficacy: 139.0 lumens/watt
Luminous Opening: Circular (Dia: 1.12' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B2 - U0 - G1

Input Watts (W): 28
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

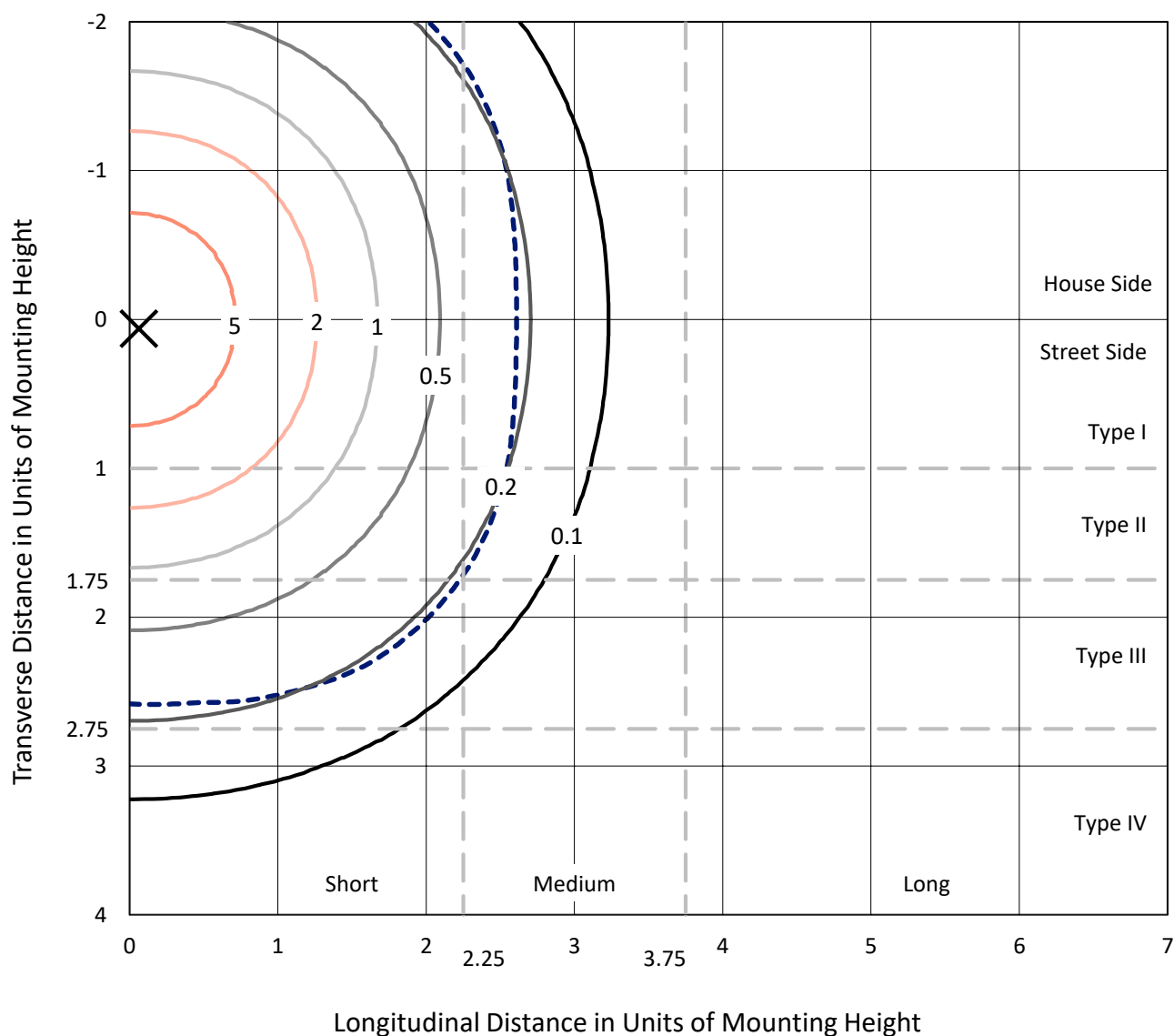


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

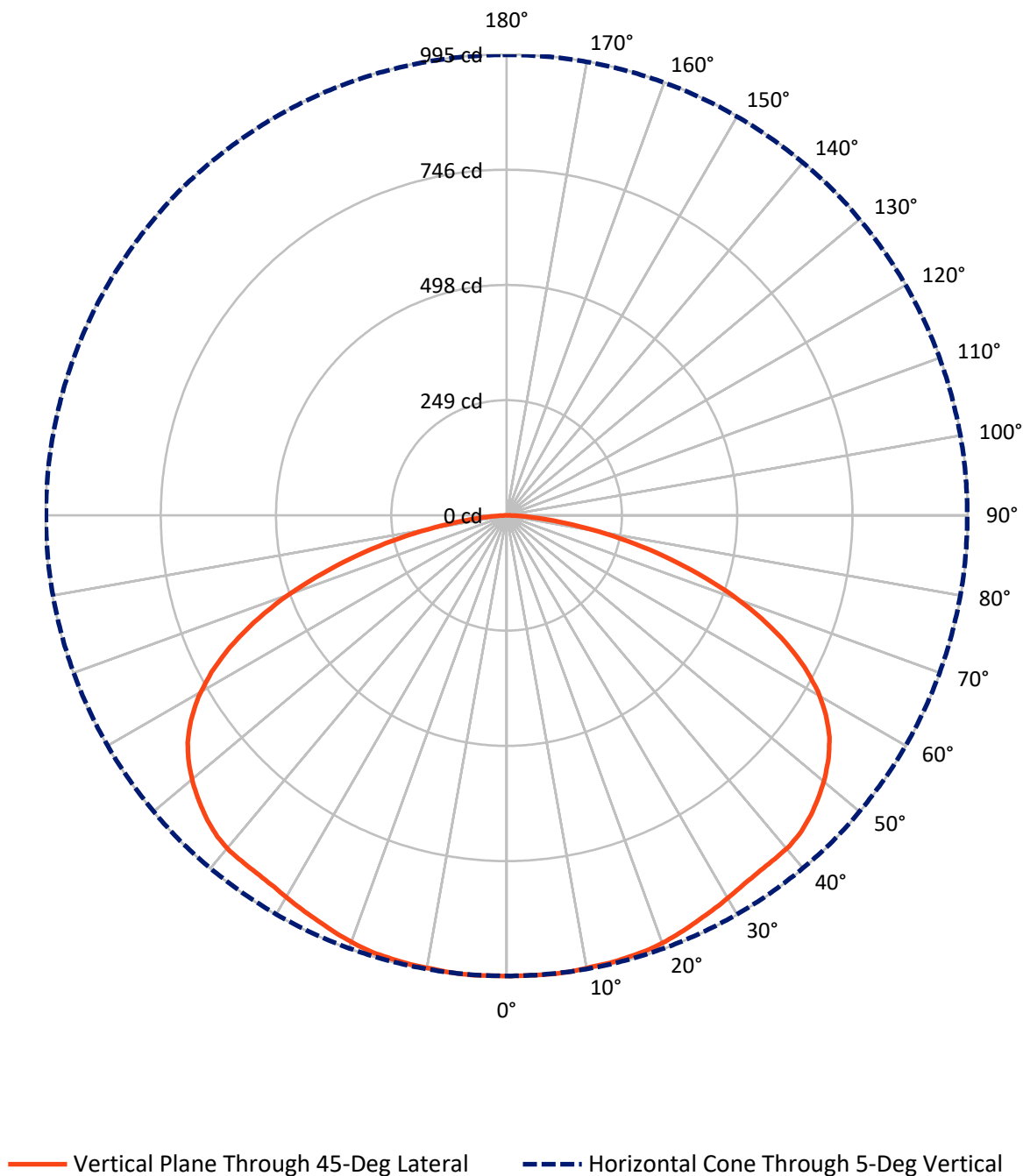


Based on 10 foot mounting height. Maximum calculated value = 9.9 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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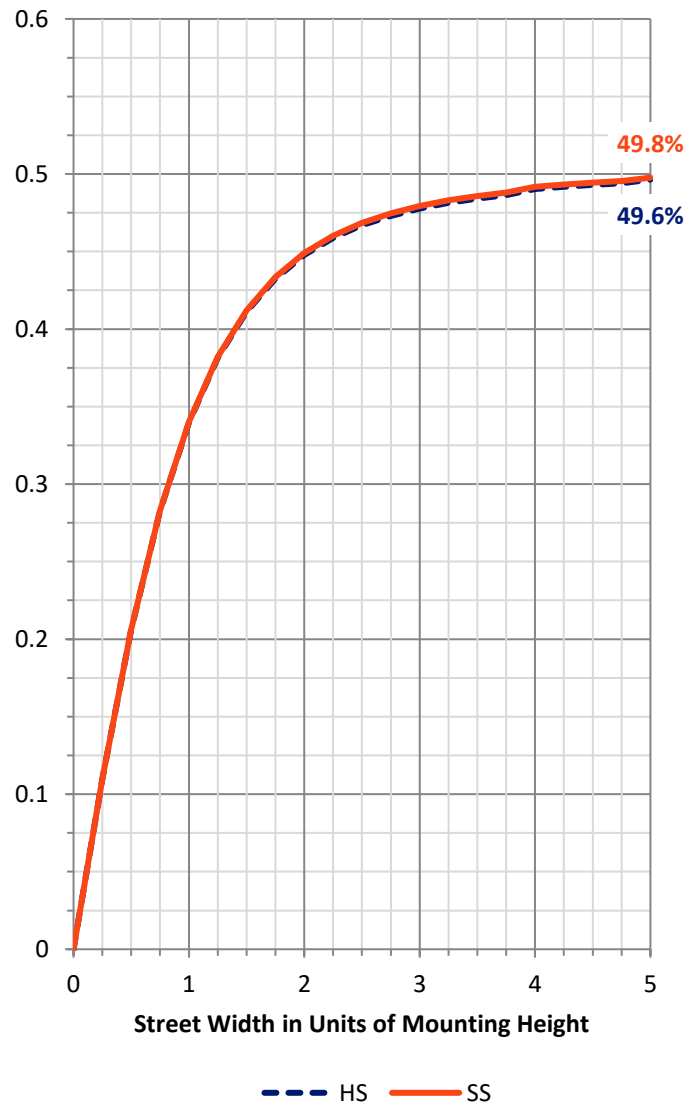
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1945.7	0.0	1945.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1945.7	0.0	1945.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	3891.5	0.0	3891.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.8	2.4
10°-20°	279.7	7.2
20°-30°	446.4	11.5
30°-40°	587.9	15.1
40°-50°	699.4	18.0
50°-60°	731.9	18.8
60°-70°	622.4	16.0
70°-80°	353.7	9.1
80°-90°	75.2	1.9
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°-90°	3891.5	100.0
0°-180°	3891.5	100.0

Coefficient of Utilization



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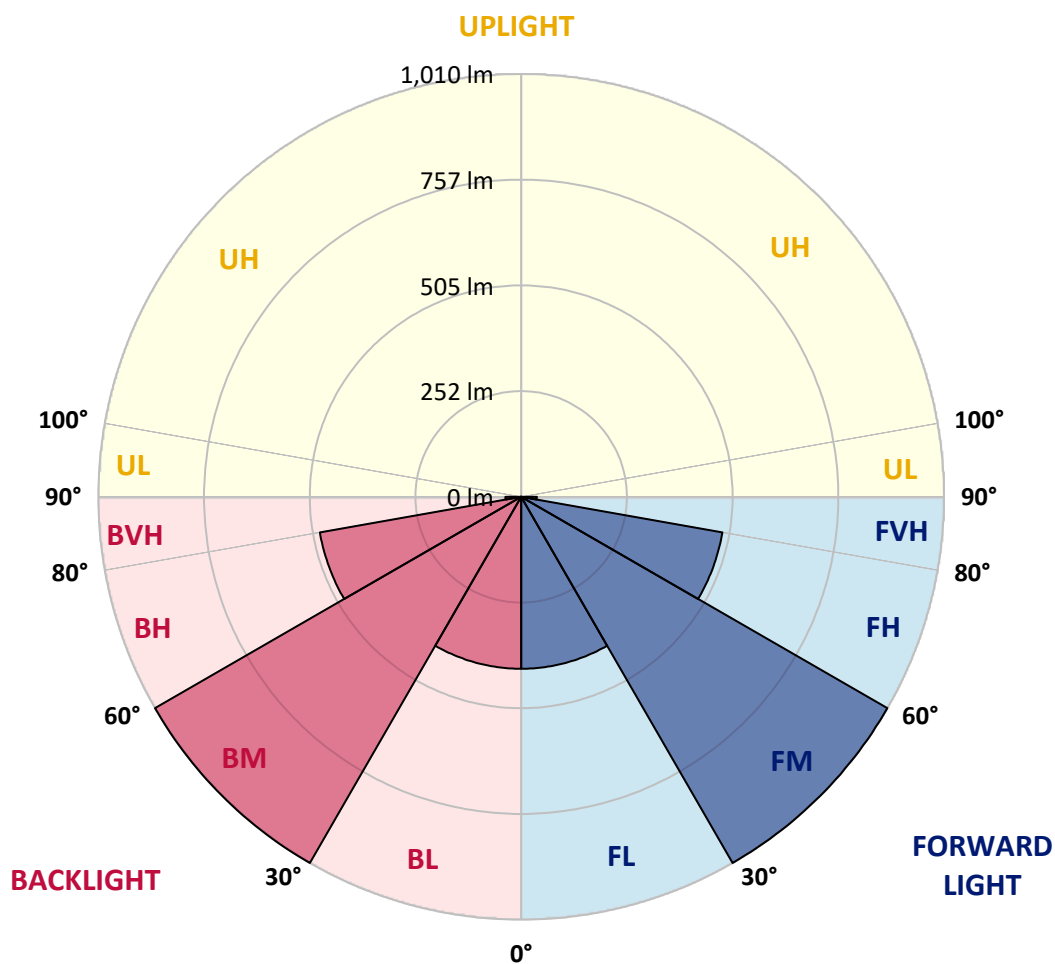
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	410.4	10.5			
FM	(30°-60°)	1009.6	25.9			
FH	(60°-80°)	488.1	12.5			G0/660
FVH	(80°-90°)	37.6	1.0			G1/100
BL	(0°-30°)	410.4	10.5	B1/500		
BM	(30°-60°)	1009.6	25.9	B2/2500		
BH	(60°-80°)	488.1	12.5	B1/500		G0/660
BVH	(80°-90°)	37.6	1.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	994.2	994.2	994.2	994.2	994.2	994.2	994.2	994.2	994.2	994.2	994.2
2.5°	994.2	994.2	994.2	994.2	994.2	994.2	994.2	994.2	994.2	994.2	994.2
5°	994.2	994.2	994.2	994.2	994.2	994.2	994.2	994.2	994.2	995.0	994.2
7.5°	993.5	993.5	993.5	993.5	994.2	993.5	993.5	994.2	994.2	994.2	994.2
10°	991.9	991.2	991.2	991.9	991.9	991.9	991.9	991.9	992.7	991.9	991.9
12.5°	989.6	988.9	989.6	989.6	989.6	990.4	990.4	990.4	991.2	991.2	990.4
15°	987.3	987.3	987.3	987.3	987.3	988.1	988.1	988.9	988.9	988.9	988.9
17.5°	984.3	984.3	984.3	985.0	985.0	985.8	985.8	985.8	986.6	986.6	986.6
20°	978.9	978.1	978.9	978.9	979.7	980.4	980.4	981.2	981.2	981.2	981.2
22.5°	971.2	971.2	972.0	972.0	972.8	973.5	973.5	974.3	974.3	974.3	974.3
25°	963.6	964.3	964.3	965.1	965.1	965.9	966.6	966.6	966.6	966.6	966.6
27.5°	955.9	956.7	956.7	956.7	957.4	958.2	959.0	959.7	960.5	959.7	959.7
30°	947.5	947.5	948.2	949.0	949.8	950.5	952.1	952.8	953.6	952.8	952.8
32.5°	938.2	939.0	939.8	940.5	942.1	943.6	945.2	945.9	946.7	945.9	945.9
35°	931.3	931.3	932.9	934.4	935.9	938.2	939.8	941.3	942.8	942.1	941.3
37.5°	924.4	924.4	926.0	928.3	931.3	934.4	937.5	939.8	940.5	940.5	939.8
40°	916.0	916.8	918.3	922.1	926.7	930.6	934.4	937.5	939.0	939.0	937.5
42.5°	906.8	907.6	909.9	913.7	919.1	923.7	928.3	930.6	932.9	932.9	931.3
45°	893.7	894.5	897.6	901.4	906.8	911.4	916.8	919.1	922.1	921.4	920.6
47.5°	876.9	877.6	880.7	884.5	889.9	895.3	900.7	904.5	906.8	906.8	906.0
50°	856.2	856.9	860.0	863.8	870.7	876.9	882.2	886.1	889.9	889.9	889.1
52.5°	830.1	831.6	833.9	839.3	847.0	853.9	860.8	866.9	869.2	870.0	869.2
55°	797.9	799.4	802.5	808.6	817.0	825.5	833.1	840.0	843.1	845.4	843.9
57.5°	760.3	761.8	765.6	772.5	781.7	790.2	800.2	807.8	810.1	812.4	811.7
60°	715.8	718.1	721.9	729.6	738.8	748.0	757.2	766.4	768.7	771.8	770.2
62.5°	663.6	665.9	669.7	678.2	688.1	696.6	707.3	715.8	718.1	721.1	720.4
65°	603.8	606.1	609.9	619.1	628.3	637.5	647.5	656.7	659.0	662.1	661.3
67.5°	535.5	537.8	541.6	552.4	561.6	570.8	579.2	588.4	590.0	593.0	592.3
70°	463.4	466.4	469.5	479.5	487.9	495.6	504.8	512.5	515.5	517.1	515.5
72.5°	391.3	393.6	396.6	403.5	409.7	416.6	425.8	431.1	433.4	434.2	434.2
75°	316.8	319.1	319.1	326.8	331.4	335.3	342.9	346.8	348.3	349.8	349.8
77.5°	246.3	244.7	246.3	249.3	252.4	255.5	260.1	262.4	263.9	267.0	265.4
80°	172.6	173.4	174.1	176.4	178.0	178.7	181.8	182.6	183.4	186.4	184.9
82.5°	111.2	109.7	111.2	110.5	112.0	109.7	111.2	113.5	112.0	113.5	114.3
85°	58.3	56.0	56.0	56.8	57.5	56.0	56.8	56.0	56.0	57.5	56.8
87.5°	18.4	17.6	18.4	17.6	18.4	17.6	18.4	19.2	18.4	18.4	19.2
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	994.2	994.2	994.2	994.2	994.2	994.2	994.2	994.2
2.5°	994.2	994.2	994.2	994.2	994.2	994.2	994.2	994.2
5°	994.2	994.2	994.2	994.2	994.2	994.2	994.2	994.2
7.5°	993.5	993.5	993.5	993.5	993.5	993.5	992.7	993.5
10°	991.9	991.9	991.9	991.9	991.2	991.2	991.2	991.2
12.5°	990.4	990.4	989.6	989.6	989.6	989.6	988.9	988.9
15°	988.9	988.1	988.1	987.3	987.3	987.3	986.6	987.3
17.5°	986.6	985.8	985.8	985.0	985.0	984.3	984.3	984.3
20°	981.2	980.4	980.4	979.7	979.7	978.9	978.1	978.1
22.5°	973.5	973.5	973.5	972.8	972.0	972.0	971.2	971.2
25°	966.6	965.9	965.9	965.1	964.3	964.3	963.6	963.6
27.5°	959.7	959.0	958.2	956.7	956.7	955.9	955.1	954.4
30°	952.1	950.5	949.0	948.2	947.5	945.9	945.2	944.4
32.5°	944.4	942.8	941.3	939.8	937.5	936.7	935.2	935.2
35°	939.8	937.5	935.2	932.1	929.8	927.5	926.0	925.2
37.5°	937.5	934.4	930.6	926.7	922.9	919.8	917.5	917.5
40°	934.4	930.6	926.0	920.6	916.0	912.2	909.9	909.1
42.5°	928.3	924.4	918.3	913.7	907.6	903.7	900.7	899.9
45°	917.5	913.7	908.3	902.2	896.1	891.4	888.4	887.6
47.5°	903.7	899.1	893.0	886.8	880.7	875.3	872.3	871.5
50°	886.1	881.5	875.3	869.2	862.3	856.9	853.1	853.1
52.5°	866.1	860.8	853.9	847.0	839.3	833.9	830.1	829.3
55°	840.0	833.9	827.0	819.3	810.9	804.8	800.2	799.4
57.5°	807.8	800.9	793.3	784.8	776.4	769.5	764.1	763.3
60°	767.2	759.5	751.8	743.4	734.2	726.5	721.1	719.6
62.5°	717.3	708.9	700.4	692.8	682.8	675.1	669.7	668.2
65°	658.2	651.3	642.9	633.7	622.9	615.3	609.9	609.1
67.5°	589.2	582.3	573.8	565.4	554.7	547.8	542.4	540.9
70°	513.2	507.1	500.2	491.8	482.5	475.6	470.3	469.5
72.5°	432.7	427.3	421.2	415.0	405.8	400.5	395.9	395.1
75°	349.8	344.5	339.9	335.3	328.3	324.5	319.9	319.9
77.5°	265.4	263.9	260.8	255.5	251.6	248.6	246.3	244.7
80°	185.7	184.1	182.6	179.5	177.2	176.4	174.9	173.4
82.5°	113.5	112.8	113.5	112.0	111.2	111.2	110.5	108.9
85°	57.5	58.3	57.5	56.8	56.8	56.8	56.8	56.0
87.5°	18.4	19.2	18.4	17.6	17.6	17.6	17.6	16.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)