

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: P299695

Luminaire Tested: **GLNA-AF-01-LED-E1-5MQ-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299695
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-01-LED-E1-5MQ-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3734.5 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B2 - U0 - G1

Input Watts (W): 34
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

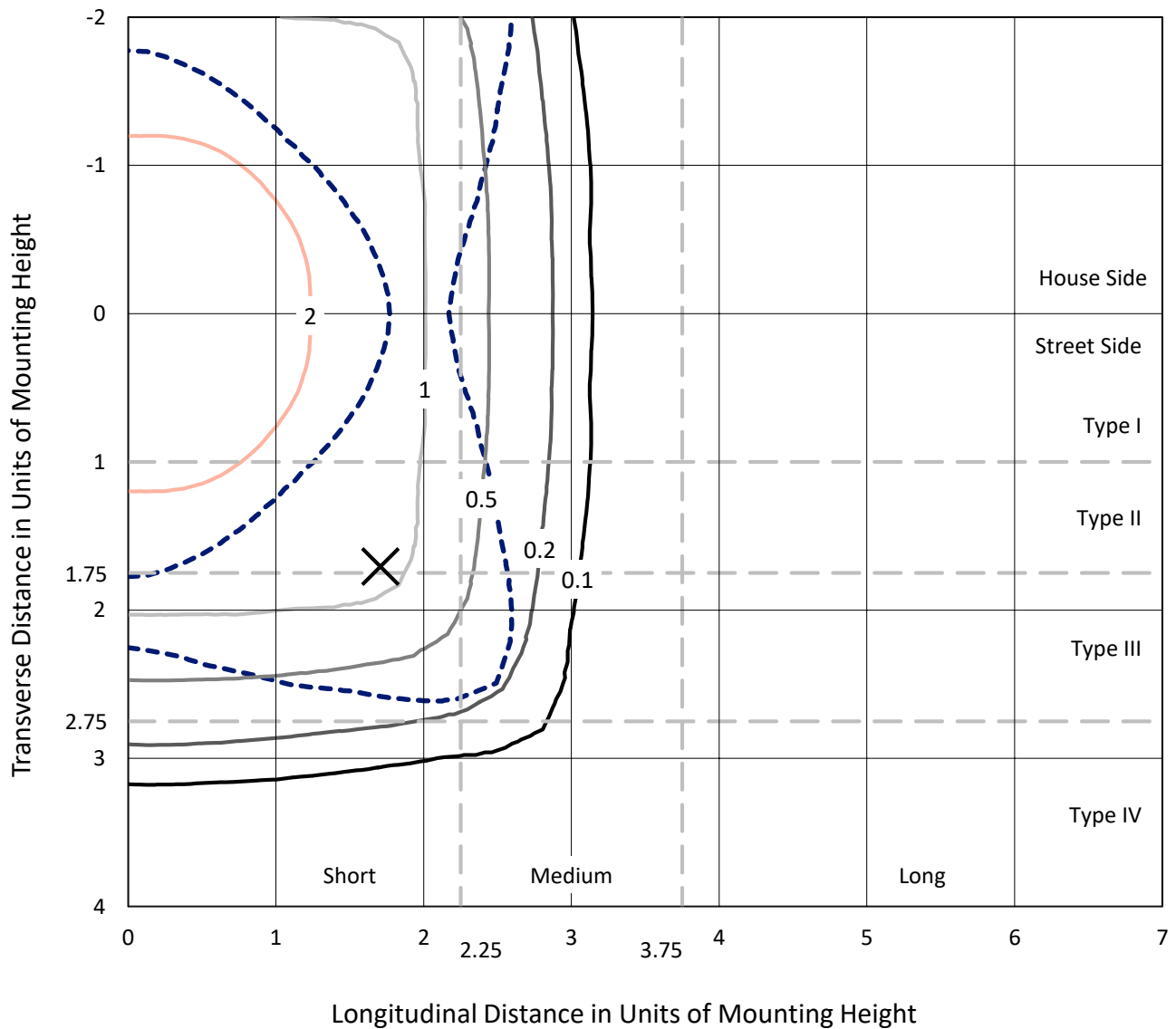


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Iso-Footcandle Lines of Horizontal Illumination

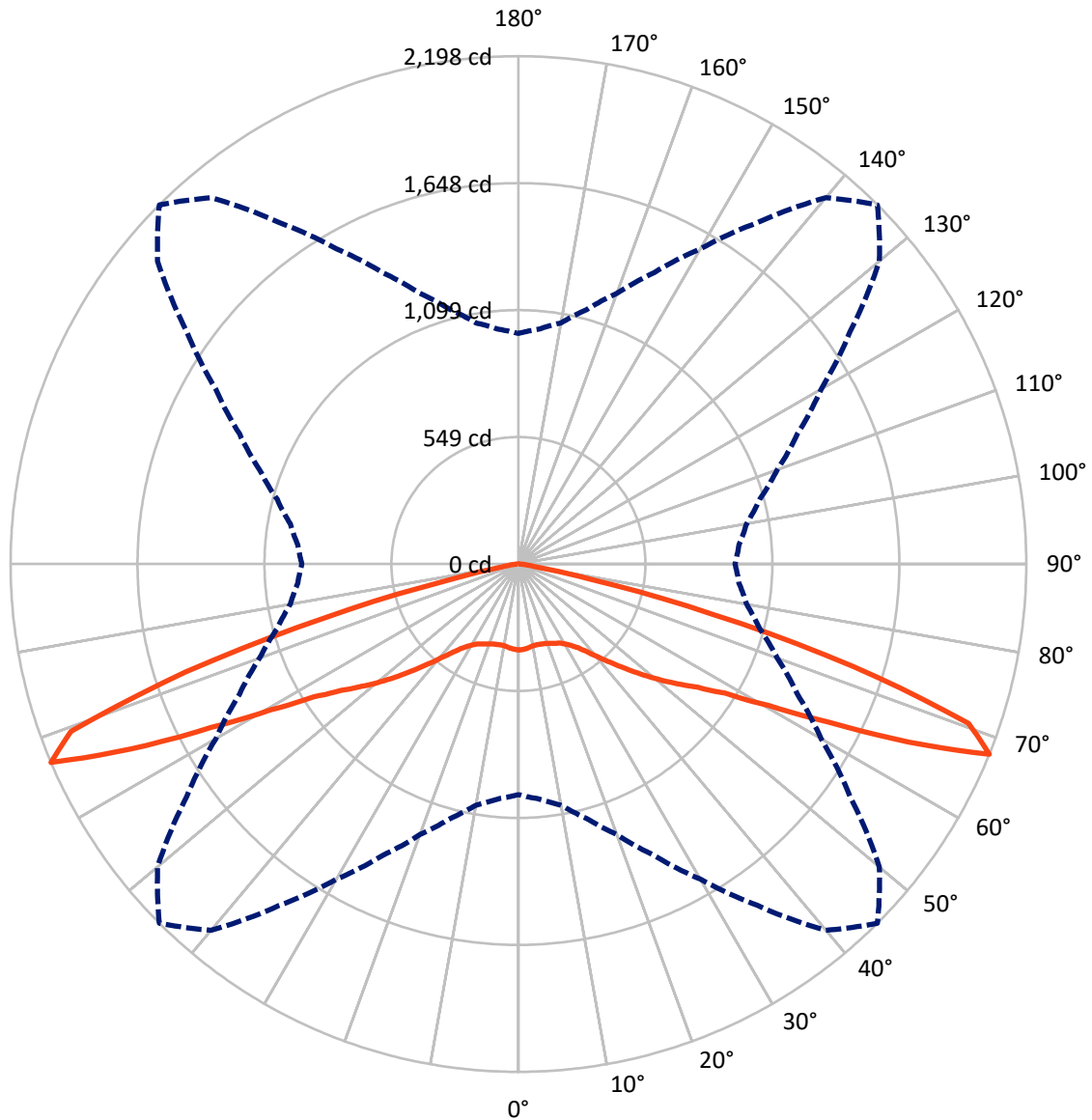
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.7 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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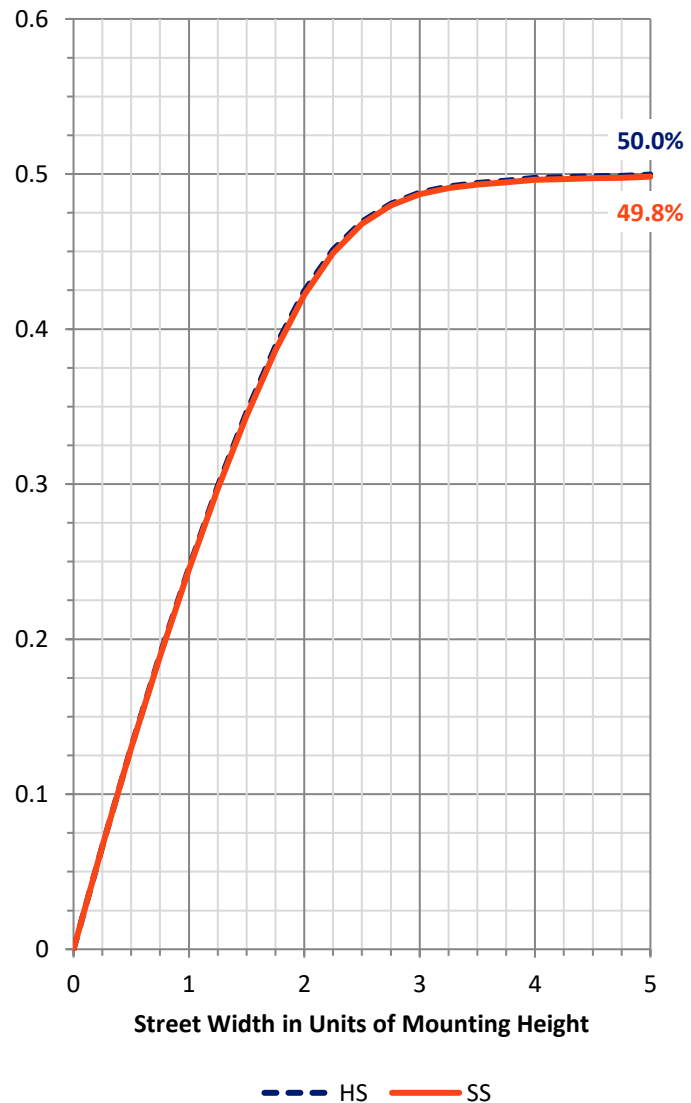
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1867.3	0.0	1867.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1867.3	0.0	1867.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	3734.5	0.0	3734.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.8	0.9
10°-20°	101.1	2.7
20°-30°	171.8	4.6
30°-40°	280.9	7.5
40°-50°	501.4	13.4
50°-60°	845.4	22.6
60°-70°	1312.0	35.1
70°-80°	461.0	12.3
80°-90°	26.0	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°-90°	3734.5	100.0
0°-180°	3734.5	100.0

Coefficient of Utilization



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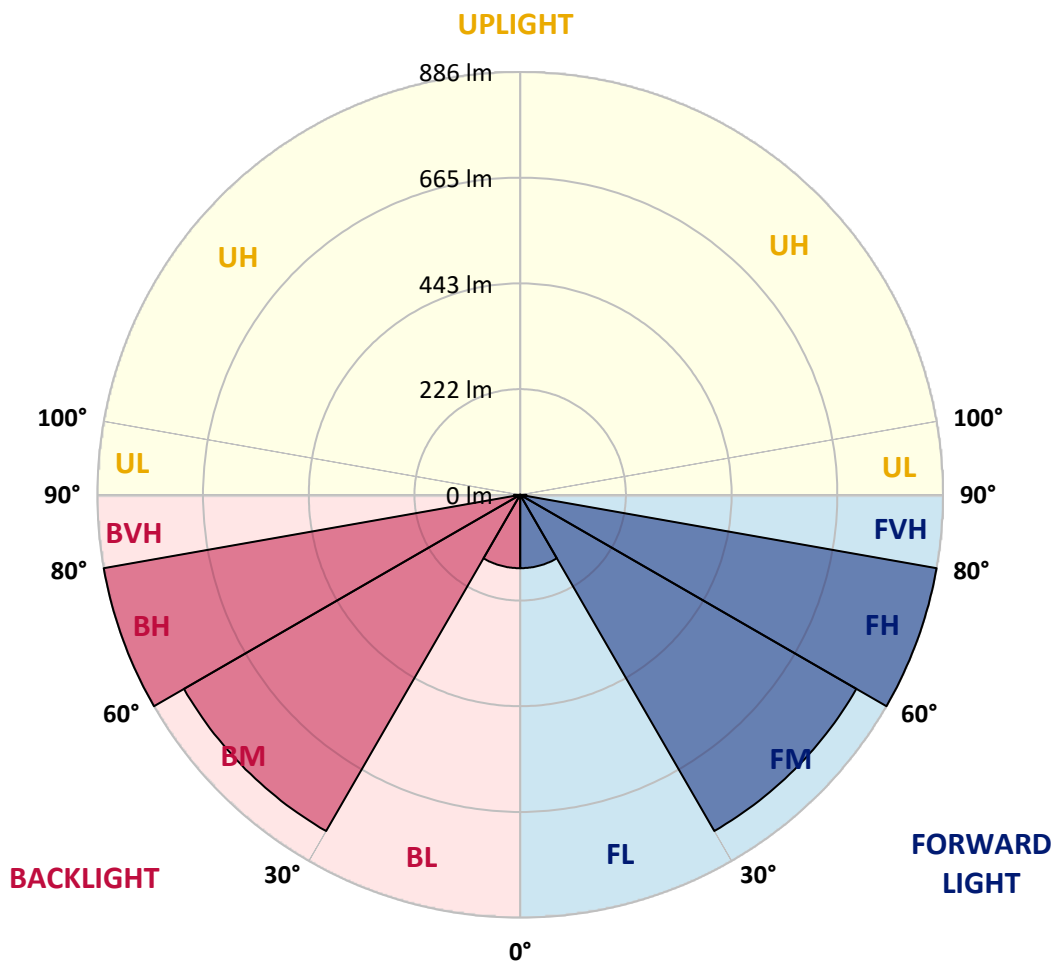
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	153.9	4.1			
FM	(30°-60°)	813.9	21.8			
FH	(60°-80°)	886.5	23.7			G1/1800
FVH	(80°-90°)	13.0	0.3			G1/100
BL	(0°-30°)	153.9	4.1	B1/500		
BM	(30°-60°)	813.9	21.8	B1/1000		
BH	(60°-80°)	886.5	23.7	B2/1000		G1/1800
BVH	(80°-90°)	13.0	0.3			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°	372.2	372.2	372.2	372.2	372.2	372.2	372.2	372.2	372.2	372.2	372.2
2.5°	370.8	371.1	371.1	371.1	371.0	371.0	370.6	371.0	370.8	370.3	370.4
5°	367.7	368.0	368.0	367.9	368.4	368.2	367.7	368.0	367.9	367.5	367.7
7.5°	363.2	363.7	363.7	363.6	364.1	363.9	363.6	363.7	363.7	363.2	363.2
10°	358.3	358.6	358.6	358.4	359.3	359.3	359.1	359.6	359.8	359.3	358.9
12.5°	353.6	354.1	354.1	354.8	355.7	356.0	356.9	357.6	358.3	358.1	357.4
15°	350.9	351.2	351.9	352.8	354.1	355.3	356.7	358.3	359.6	360.0	358.9
17.5°	349.1	349.7	350.7	351.9	353.8	355.8	357.9	360.0	361.9	362.5	361.3
20°	348.6	349.0	350.0	352.1	354.6	357.7	360.7	363.1	365.6	366.5	365.6
22.5°	349.7	350.4	351.6	354.0	357.4	361.3	364.8	368.0	371.3	372.8	371.6
25°	354.3	355.0	356.5	359.6	363.4	367.5	371.5	375.3	378.2	379.7	378.9
27.5°	362.9	363.7	365.6	368.7	372.8	377.3	381.6	384.7	387.1	387.6	386.6
30°	375.8	377.7	379.9	383.3	388.1	391.9	396.2	399.0	401.9	401.9	401.0
32.5°	395.9	397.8	400.2	403.4	407.2	411.3	415.1	417.5	420.6	420.8	418.7
35°	425.9	426.8	428.8	430.9	434.3	437.9	441.2	442.7	445.3	445.5	443.6
37.5°	465.6	465.8	467.1	467.8	470.9	474.9	478.0	479.0	481.4	481.0	479.2
40°	511.8	512.6	513.2	514.2	517.5	521.2	524.5	525.0	527.6	527.1	524.7
42.5°	565.2	565.5	568.5	570.0	573.1	575.0	579.1	579.6	582.7	581.3	578.6
45°	625.1	628.2	631.0	634.1	637.3	639.6	642.8	642.1	644.2	642.1	640.6
47.5°	688.2	690.4	696.6	701.4	706.7	708.6	713.2	711.2	713.2	710.3	709.8
50°	757.5	761.5	766.8	772.3	778.0	781.1	787.1	784.5	787.3	784.5	783.0
52.5°	825.9	826.9	838.6	846.7	854.6	858.2	861.8	860.6	860.8	860.6	859.0
55°	890.8	893.2	904.9	915.9	929.6	939.8	945.9	945.3	943.7	942.2	939.6
57.5°	964.0	966.4	979.8	993.3	1009.0	1023.4	1035.9	1048.8	1053.8	1055.2	1049.5
60°	1062.9	1062.7	1080.6	1097.1	1119.4	1140.9	1168.4	1196.3	1228.5	1243.4	1223.7
62.5°	1163.5	1167.7	1193.4	1222.6	1268.6	1313.5	1364.1	1413.9	1464.8	1506.2	1462.2
65°	1151.5	1167.3	1205.6	1271.7	1356.8	1457.7	1567.0	1682.5	1787.0	1858.8	1778.2
67.5°	998.0	1020.5	1059.5	1139.8	1246.2	1391.8	1575.2	1803.8	2069.5	2197.9	2038.7
70°	723.4	748.8	789.7	868.1	973.4	1111.9	1311.1	1585.5	1937.2	2066.7	1891.4
72.5°	360.0	373.7	399.0	448.9	528.6	640.9	821.6	1085.4	1396.6	1515.4	1355.2
75°	122.3	128.6	132.9	149.2	174.5	218.6	308.4	474.5	723.9	867.8	713.6
77.5°	70.6	70.8	73.7	76.6	80.9	85.7	97.7	128.3	221.9	315.1	229.6
80°	45.7	45.5	47.9	50.1	53.1	55.5	56.2	59.4	68.5	81.2	72.6
82.5°	23.7	26.6	31.9	34.9	40.4	41.4	40.0	38.8	41.0	42.6	43.6
85°	13.1	11.3	17.0	22.0	24.4	24.7	24.7	23.4	24.2	23.7	25.8
87.5°	6.0	5.5	6.7	10.8	11.5	9.8	10.3	9.1	6.5	6.4	7.2
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°	372.2	372.2	372.2	372.2	372.2	372.2	372.2	372.2
2.5°	370.4	370.6	370.6	371.1	371.3	371.6	372.0	372.2
5°	367.5	368.0	367.7	368.2	368.2	368.6	368.6	368.7
7.5°	363.2	363.7	363.7	363.7	363.6	364.1	364.1	364.1
10°	358.8	359.1	358.9	358.6	358.3	358.8	358.6	358.4
12.5°	357.4	356.5	355.8	355.5	354.8	355.0	354.5	354.5
15°	358.3	356.7	355.5	355.0	354.3	354.0	353.6	353.8
17.5°	360.5	358.6	357.0	356.2	355.3	354.8	354.1	354.3
20°	364.4	362.2	360.0	358.3	356.7	355.8	355.3	355.2
22.5°	370.3	367.0	363.7	361.2	359.1	357.9	357.4	357.0
25°	377.0	373.4	369.6	366.7	364.6	363.1	362.0	362.0
27.5°	385.4	382.5	379.0	375.6	373.7	372.2	371.5	371.1
30°	399.5	396.7	394.0	390.7	388.3	386.8	385.6	384.5
32.5°	417.5	415.3	413.0	410.6	408.4	406.3	404.4	403.6
35°	442.9	441.2	439.7	436.9	436.1	434.8	433.8	433.0
37.5°	478.0	477.3	477.3	474.3	473.7	473.1	472.1	472.3
40°	524.0	524.7	523.8	522.8	522.3	520.9	520.9	522.1
42.5°	578.4	578.9	580.8	579.1	581.0	579.3	578.3	579.1
45°	641.6	643.5	647.3	645.6	646.8	643.9	640.2	640.4
47.5°	712.6	714.3	715.8	714.6	714.8	710.0	705.2	704.0
50°	786.2	786.9	787.8	786.1	786.4	781.1	775.6	775.8
52.5°	859.0	862.3	865.7	861.1	860.1	854.1	846.3	843.2
55°	942.3	947.0	943.0	935.0	926.9	918.8	908.7	907.0
57.5°	1045.0	1037.1	1024.8	1009.5	998.3	987.0	976.7	972.4
60°	1187.9	1158.2	1135.9	1113.2	1099.0	1085.1	1071.5	1069.4
62.5°	1389.9	1338.5	1294.1	1247.2	1208.9	1179.0	1155.1	1148.4
65°	1643.0	1521.6	1416.3	1318.1	1232.8	1168.4	1127.8	1110.0
67.5°	1751.9	1512.2	1331.7	1192.2	1080.6	1002.6	958.8	937.0
70°	1539.5	1254.1	1057.8	918.1	816.5	733.3	693.7	670.3
72.5°	1059.1	797.7	630.8	514.9	433.6	364.1	336.6	334.6
75°	475.6	315.0	217.1	167.3	140.8	122.5	116.8	112.5
77.5°	133.1	98.4	87.8	82.1	76.6	70.2	67.8	68.4
80°	64.7	61.1	58.7	55.1	50.1	44.8	42.4	43.5
82.5°	42.9	42.4	44.0	41.4	34.2	29.0	24.4	22.3
85°	26.1	26.4	27.0	27.1	23.0	16.1	11.0	12.4
87.5°	10.3	11.9	12.9	13.4	12.5	7.7	6.2	6.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)