

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: P300422

Luminaire Tested: **GLNA-AF-02-LED-E1-T4FT-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300422
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24295)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-02-LED-E1-T4FT-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6988.6 lumens
Efficiency: N/A
Efficacy: 105.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

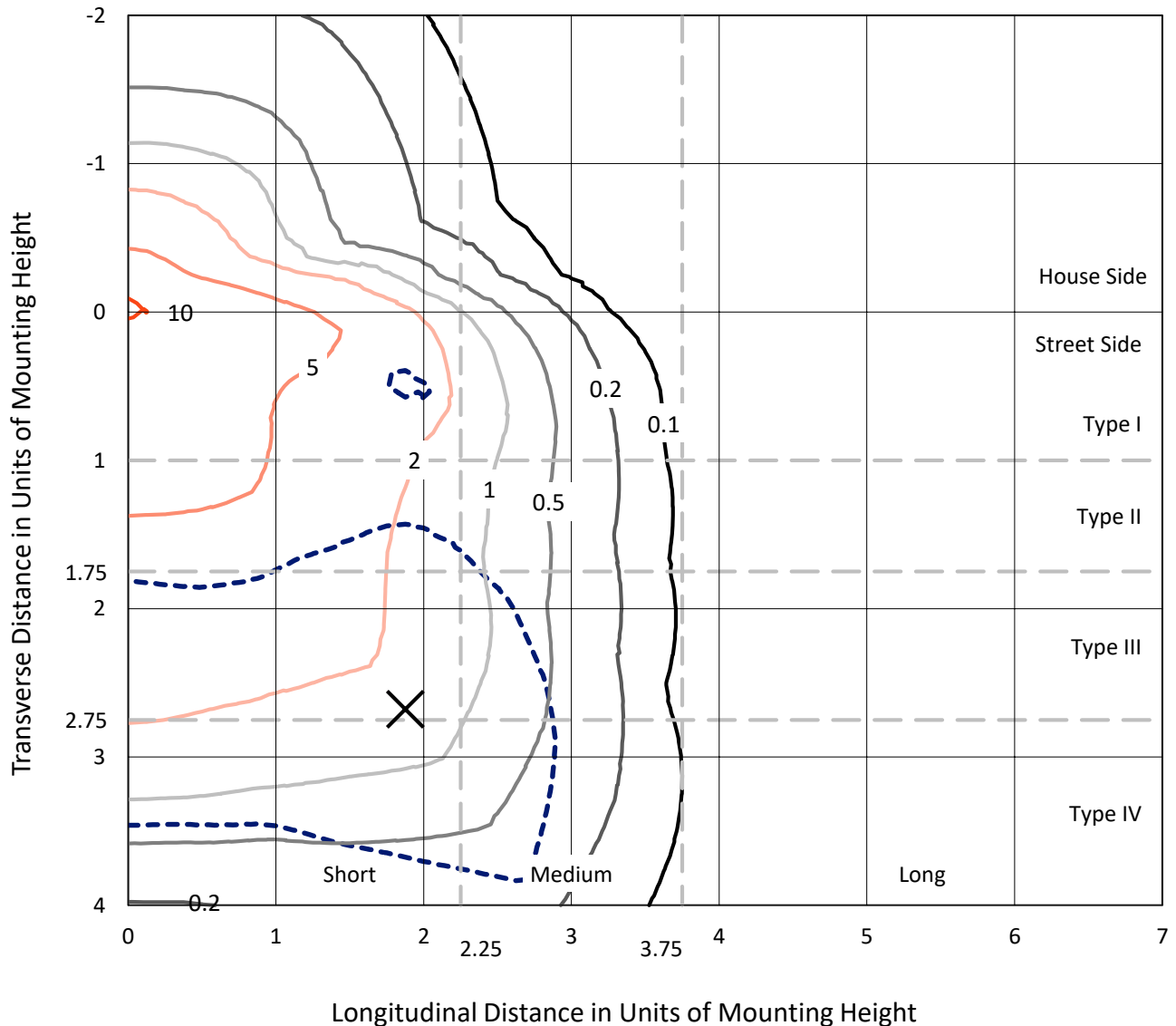
Input Watts (W): 66
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

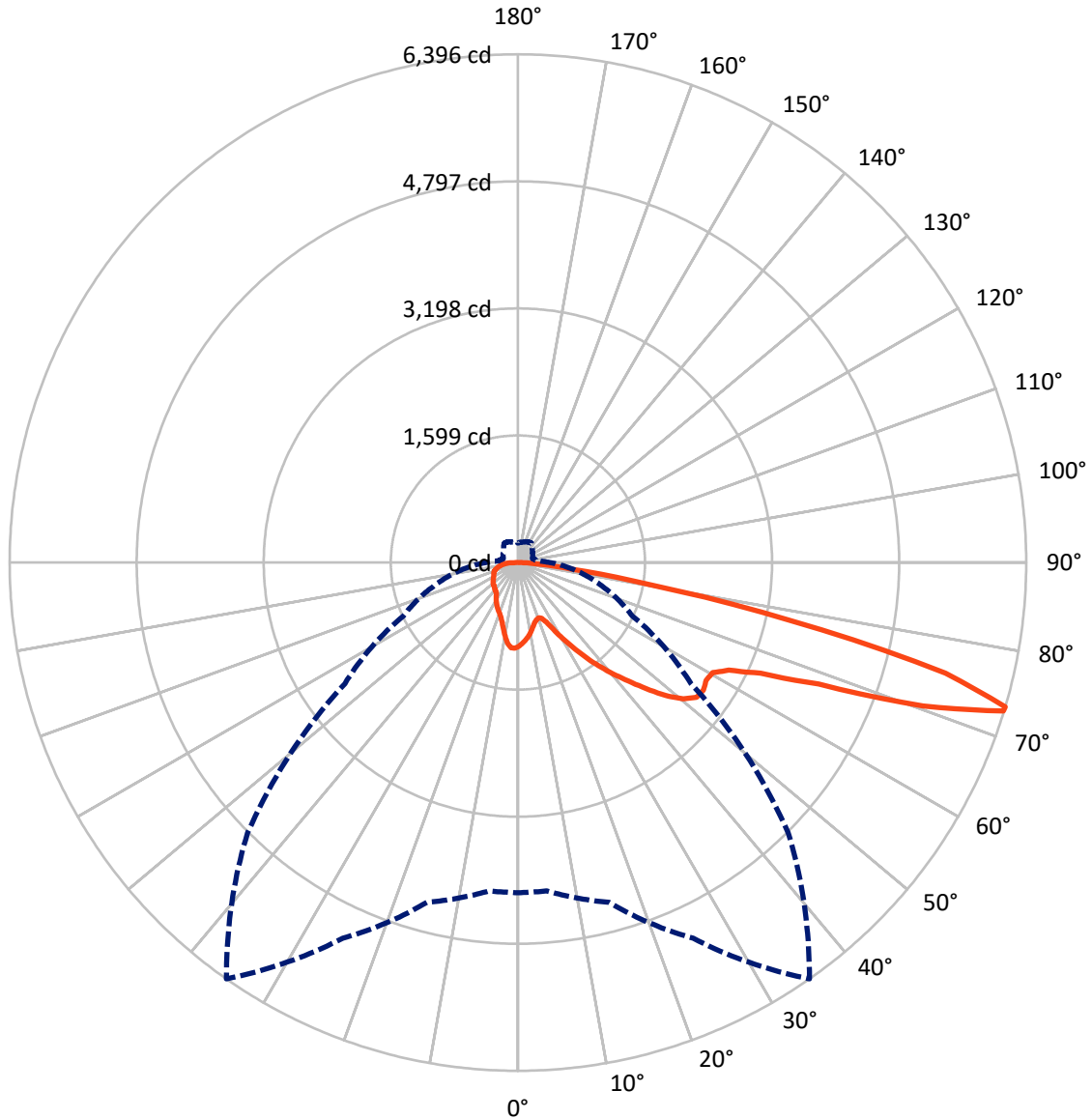
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.5 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1332.9	0.0	1332.9
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	5655.7	0.0	5655.7
	% Fixture	80.9	0.0	80.9
Total	Lumens	6988.6	0.0	6988.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.5	1.4
10°-20°	238.3	3.4
20°-30°	385.3	5.5
30°-40°	646.1	9.2
40°-50°	995.9	14.3
50°-60°	1336.1	19.1
60°-70°	1780.0	25.5
70°-80°	1357.6	19.4
80°-90°	153.9	2.2
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°	6988.6	100.0
0°-180°	6988.6	100.0



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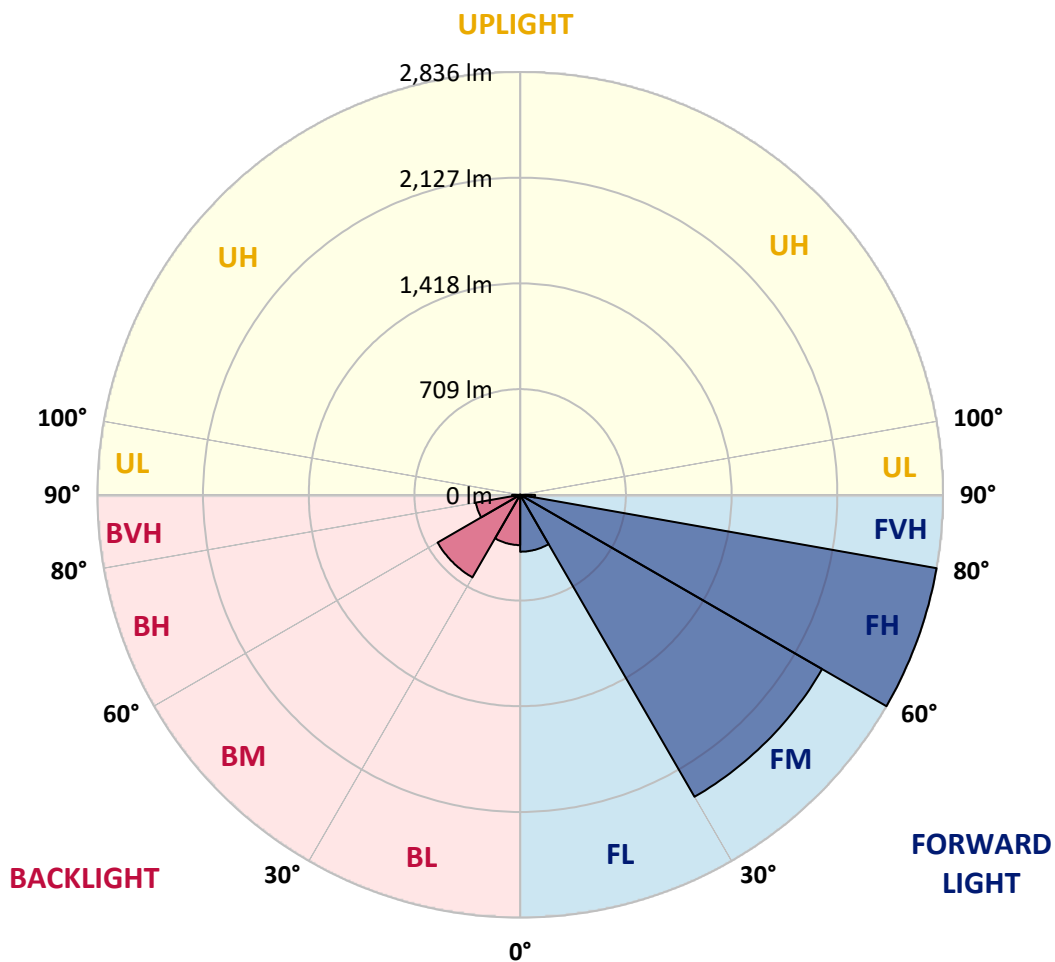
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	381.8	5.5			
FM	(30°-60°)	2338.4	33.5			
FH	(60°-80°)	2836.0	40.6			G2/5000
FVH	(80°-90°)	99.5	1.4			G1/100
BL	(0°-30°)	337.3	4.8	B1/500		
BM	(30°-60°)	639.6	9.2	B1/1000		
BH	(60°-80°)	301.6	4.3	B1/500		G1/500
BVH	(80°-90°)	54.4	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1054.8	1054.8	1054.8	1054.8	1054.8	1054.8	1054.8	1054.8	1054.8	1054.8	1054.8
2.5°	1013.2	1015.2	1012.8	1015.9	1020.9	1026.3	1030.0	1035.3	1041.4	1049.8	1051.8
5°	965.5	968.5	968.5	973.9	983.6	992.4	1000.4	1009.2	1021.9	1036.3	1042.0
7.5°	913.2	914.8	917.9	925.9	940.0	952.4	963.8	977.9	995.4	1014.5	1024.6
10°	850.1	852.4	857.1	868.5	887.7	904.8	921.2	940.7	962.8	986.7	999.4
12.5°	805.4	804.8	806.8	815.2	832.0	852.8	876.6	901.4	928.6	956.5	971.9
15°	790.3	786.6	778.9	776.9	786.0	806.8	834.3	864.8	897.4	931.0	950.1
17.5°	799.7	793.4	772.2	756.8	755.4	771.2	800.4	834.6	872.2	913.2	937.0
20°	858.8	843.7	791.7	755.8	743.4	751.1	776.6	812.8	857.1	911.5	942.0
22.5°	1000.1	977.9	867.5	800.7	758.8	749.4	768.5	807.1	858.8	932.3	971.2
25°	1205.8	1174.3	997.7	912.8	826.3	776.2	780.6	820.2	882.6	980.6	1027.6
27.5°	1368.2	1347.8	1167.9	1070.9	949.1	848.7	819.9	853.1	931.3	1059.8	1107.8
30°	1464.9	1452.5	1349.8	1250.1	1105.8	964.2	895.0	914.8	1007.5	1169.6	1209.2
32.5°	1577.0	1569.6	1519.3	1427.6	1274.9	1115.9	1014.2	1007.1	1109.5	1301.5	1319.6
35°	1693.1	1690.8	1661.2	1595.4	1456.5	1315.9	1172.3	1124.6	1220.6	1438.4	1427.0
37.5°	1801.2	1797.1	1780.0	1741.8	1646.5	1530.7	1333.3	1245.1	1340.4	1569.3	1518.6
40°	2000.2	1968.6	1909.9	1881.0	1838.4	1711.6	1461.2	1357.5	1464.6	1694.1	1597.8
42.5°	2242.8	2191.5	2082.1	2042.5	2036.4	1854.2	1548.5	1466.6	1589.7	1818.0	1675.7
45°	2433.8	2385.5	2291.2	2241.1	2263.3	1983.4	1636.1	1583.0	1718.6	1947.8	1755.9
47.5°	2637.5	2561.6	2436.8	2451.9	2500.2	2105.6	1725.3	1708.2	1859.9	2093.1	1855.5
50°	2644.9	2586.8	2532.1	2622.4	2697.6	2218.0	1837.1	1839.4	2032.7	2276.0	1988.1
52.5°	2491.5	2479.1	2566.0	2708.0	2816.4	2306.9	1964.3	1975.0	2253.9	2486.1	2133.8
55°	2437.8	2423.7	2524.1	2678.1	2832.5	2380.4	2102.2	2121.7	2521.4	2707.6	2275.7
57.5°	2568.7	2537.5	2544.2	2664.0	2793.2	2461.0	2252.6	2291.8	2812.0	2901.3	2367.0
60°	2934.5	2867.7	2740.9	2737.8	2814.4	2581.8	2426.4	2474.4	3114.0	2993.9	2331.4
62.5°	3447.6	3380.8	3143.2	2988.5	2977.1	2781.1	2639.8	2652.6	3288.6	2868.4	2114.3
65°	4003.1	3943.3	3677.9	3459.4	3354.0	3111.4	2887.8	2732.1	3231.5	2523.1	1734.4
67.5°	4677.3	4613.2	4385.0	4183.3	4081.9	3644.3	3062.0	2655.9	2869.4	1954.5	1246.8
70°	5148.8	5083.4	4993.4	5156.8	5404.9	4413.2	3084.5	2346.2	2143.1	1299.1	750.4
72.5°	4533.6	4503.1	4667.2	5355.5	6388.5	4879.6	2788.2	1708.2	1244.7	689.7	434.3
73°	4153.7	4147.0	4426.9	5216.3	6395.6	4807.8	2658.3	1587.7	1067.5	610.1	397.0
75°	1875.7	1929.7	2543.2	3984.3	5556.6	3961.8	1871.0	910.8	603.1	421.5	299.7
77.5°	450.7	469.5	795.7	1892.1	3509.0	2361.0	847.7	450.4	385.6	297.7	218.8
80°	192.0	198.3	306.4	699.1	1652.2	950.8	390.6	301.7	266.8	207.7	153.4
82.5°	106.7	113.4	173.8	317.1	666.8	324.2	238.3	210.1	175.5	125.2	99.7
85°	60.4	64.1	101.7	177.2	282.6	130.2	142.6	139.6	99.0	64.4	49.0
87.5°	28.5	30.9	49.0	82.2	110.7	51.0	72.5	79.9	62.1	39.3	25.5
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1054.8	1054.8	1054.8	1054.8	1054.8	1054.8	1054.8	1054.8	1054.8	1054.8
2.5°	1054.1	1060.2	1067.2	1070.9	1074.3	1078.3	1082.3	1082.3	1083.0	1083.3
5°	1046.7	1059.2	1070.2	1074.9	1075.9	1075.9	1074.9	1069.6	1064.9	1066.9
7.5°	1031.3	1049.4	1058.8	1057.1	1044.4	1029.6	1017.2	1002.1	994.4	993.0
10°	1009.2	1030.0	1031.6	1014.9	983.3	951.8	925.6	900.1	888.0	885.0
12.5°	984.7	1003.8	993.0	958.5	907.8	861.8	828.6	802.8	791.3	788.3
15°	964.9	977.9	950.8	896.4	832.6	784.0	756.4	737.3	729.3	726.9
17.5°	954.5	957.1	907.5	834.0	766.2	725.6	708.5	699.4	696.4	694.7
20°	959.5	940.7	866.2	775.9	711.8	683.3	679.3	676.9	676.2	675.2
22.5°	984.7	935.7	828.3	720.9	664.2	651.7	655.1	654.8	654.1	653.4
25°	1029.6	940.0	791.3	668.5	624.2	621.5	627.6	627.6	624.9	624.9
27.5°	1089.0	949.1	750.1	618.8	588.0	588.3	593.0	591.7	588.6	586.6
30°	1161.5	954.8	701.7	574.2	554.1	552.7	554.1	548.4	539.3	538.6
32.5°	1235.7	947.7	645.7	534.6	518.2	515.1	514.1	506.1	495.7	492.7
35°	1302.8	921.9	588.6	503.1	483.9	477.2	481.9	479.2	469.8	467.5
37.5°	1351.8	873.9	537.3	475.2	459.4	457.8	460.8	461.8	450.7	448.4
40°	1384.7	808.8	493.3	451.7	454.7	448.4	438.3	431.2	427.9	426.9
42.5°	1411.2	741.0	456.4	440.6	455.7	437.3	415.5	404.1	410.1	412.8
45°	1441.7	674.9	425.5	426.9	450.7	424.5	399.7	388.6	391.0	391.6
47.5°	1483.7	594.3	392.3	404.7	433.9	415.8	390.0	374.2	363.1	358.1
50°	1541.8	499.0	357.8	379.9	417.5	409.4	374.9	358.1	337.6	332.9
52.5°	1582.0	410.1	329.2	359.1	402.7	396.7	362.8	341.0	319.5	315.5
55°	1560.2	340.6	304.4	335.9	383.3	380.9	352.7	323.5	306.7	303.4
57.5°	1451.1	296.7	285.3	314.1	359.4	367.5	339.3	308.8	296.7	294.3
60°	1243.1	269.2	273.2	299.4	340.0	354.1	325.9	300.7	292.6	291.0
62.5°	964.5	250.7	264.1	288.6	324.9	344.7	318.5	299.7	296.7	294.7
65°	691.0	235.9	254.4	277.9	311.1	335.9	315.8	298.3	299.0	297.3
67.5°	469.5	222.8	242.6	265.8	297.7	328.2	312.1	293.7	302.0	300.0
70°	328.6	210.1	228.9	250.4	280.9	317.5	305.4	286.6	285.9	277.9
72.5°	256.4	193.3	210.1	228.9	259.4	302.4	292.0	270.8	259.8	251.4
73°	244.7	189.3	205.4	224.2	254.7	298.7	288.3	266.5	254.1	246.3
75°	202.4	171.8	186.6	203.4	234.6	281.2	270.2	246.7	230.9	226.2
77.5°	159.1	147.0	161.1	176.2	206.7	255.7	243.3	220.8	212.1	208.1
80°	117.8	121.8	134.2	147.7	179.2	228.5	217.5	195.0	233.9	224.2
82.5°	82.9	92.3	103.7	115.8	150.3	202.0	188.6	165.5	171.2	142.3
85°	49.0	60.4	71.1	81.6	108.4	167.5	155.7	131.9	108.1	103.0
87.5°	28.5	33.6	36.6	47.3	74.5	126.2	109.7	97.7	56.0	37.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)