

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: P301204

Luminaire Tested: **GLNA-AF-01-LED-E1-T3R-7050-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301204
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194839)
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-T3R-7050-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 5000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
Roadway OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4183.1 lumens
Efficiency: N/A
Efficacy: 123.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

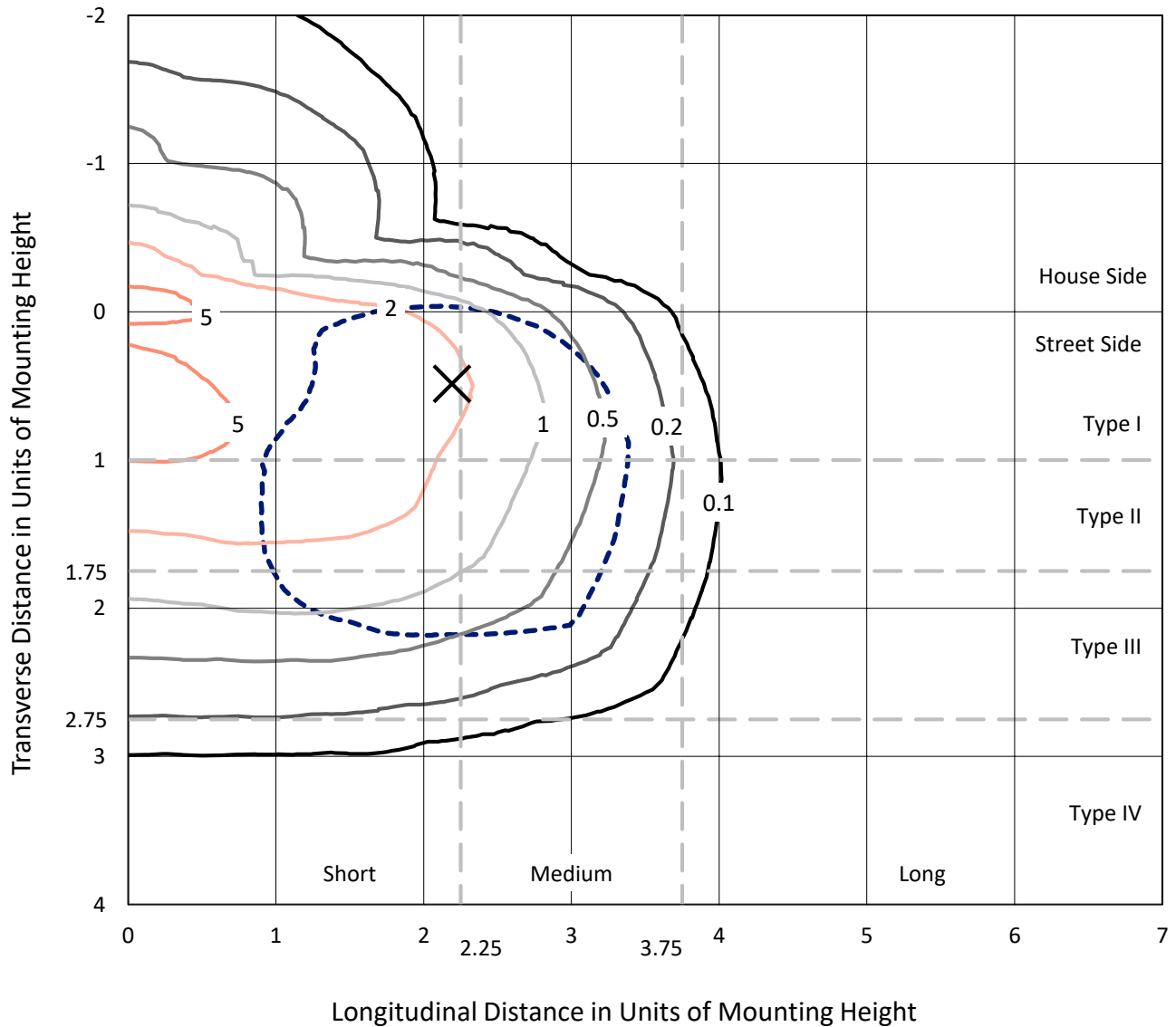
Input Watts (W): 34
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

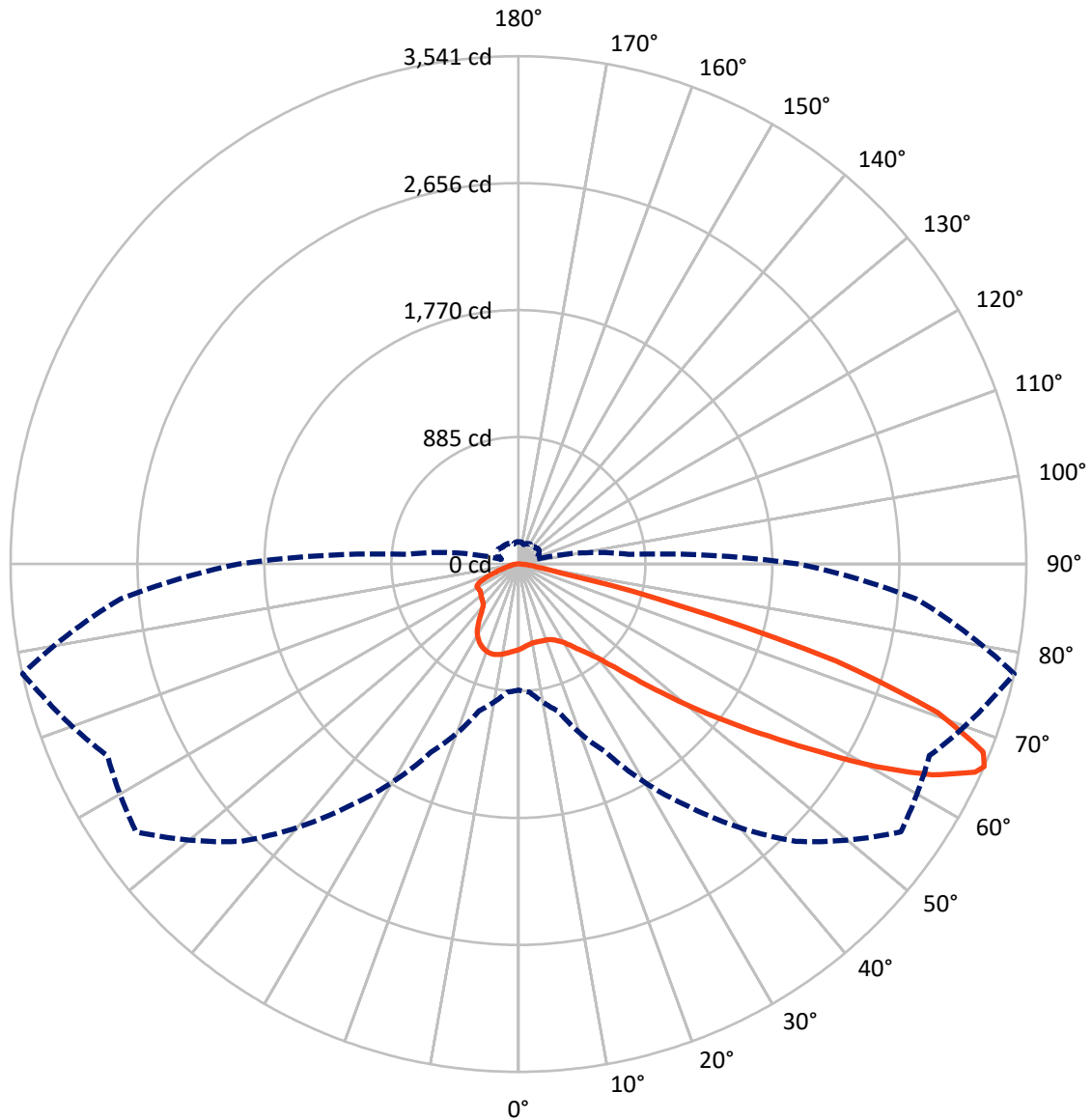
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.3 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	714.7	0.0	714.7
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	3468.4	0.0	3468.4
	% Fixture	82.9	0.0	82.9
Total	Lumens	4183.1	0.0	4183.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.3	1.3
10°-20°	150.2	3.6
20°-30°	256.4	6.1
30°-40°	410.5	9.8
40°-50°	634.2	15.2
50°-60°	899.5	21.5
60°-70°	1203.2	28.8
70°-80°	522.5	12.5
80°-90°	53.3	1.3
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°	4183.1	100.0
0°-180°	4183.1	100.0



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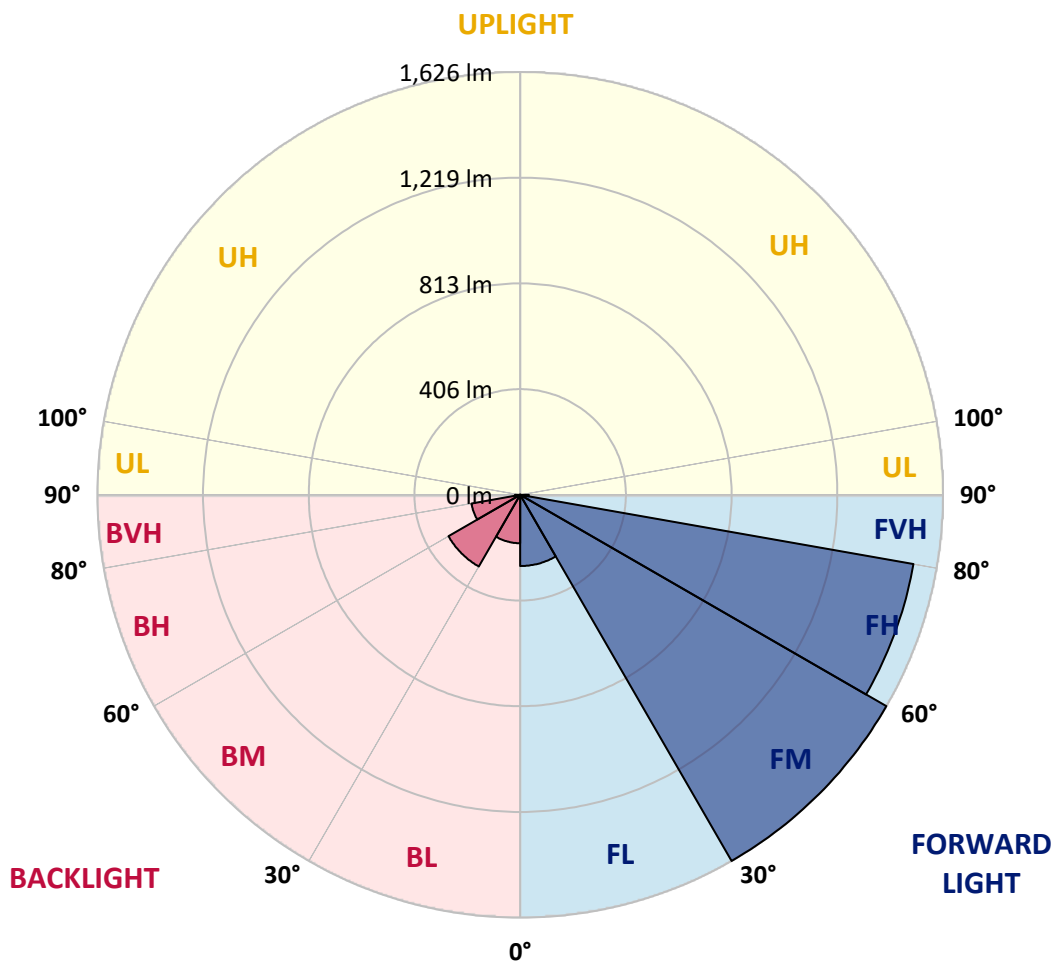
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	273.8	6.5			
FM	(30°-60°)	1625.8	38.9			
FH	(60°-80°)	1535.4	36.7			G1/1800
FVH	(80°-90°)	33.4	0.8			G1/100
BL	(0°-30°)	186.1	4.4	B1/500		
BM	(30°-60°)	318.3	7.6	B1/1000		
BH	(60°-80°)	190.3	4.6	B1/500		G1/500
BVH	(80°-90°)	19.9	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77.5°	85°
0°	596.1	596.1	596.1	596.1	596.1	596.1	596.1	596.1	596.1	596.1	596.1
2.5°	527.3	530.9	533.9	536.6	542.1	551.2	561.7	570.2	582.5	584.8	591.4
5°	478.9	478.9	481.3	485.4	492.9	506.6	520.8	539.8	566.5	572.8	590.2
7.5°	455.4	455.6	457.0	460.5	467.0	479.5	495.1	517.5	553.6	564.1	593.7
10°	464.1	462.1	459.1	457.4	458.3	465.6	480.5	505.4	545.7	559.1	601.7
12.5°	512.7	509.0	498.7	485.0	472.0	466.7	475.3	499.6	542.4	558.0	612.1
15°	592.1	590.6	571.4	543.1	511.5	485.0	479.1	497.5	542.7	559.4	624.6
17.5°	691.8	689.6	664.3	623.2	571.6	520.0	492.3	499.3	544.1	561.7	636.6
20°	792.4	785.6	758.4	709.4	643.1	567.6	514.3	503.8	545.9	564.3	649.3
22.5°	867.5	861.9	837.4	789.8	713.5	622.8	543.7	511.7	551.6	571.8	664.9
25°	933.5	933.9	909.6	863.5	784.7	681.3	581.7	532.8	566.2	587.2	686.2
27.5°	1015.1	1010.4	987.7	942.0	855.0	740.4	627.5	561.9	588.0	609.1	714.3
30°	1112.7	1109.4	1083.1	1031.3	933.1	803.8	679.9	595.7	616.1	638.0	751.0
32.5°	1227.6	1226.0	1198.7	1132.1	1023.2	878.6	741.4	640.4	658.0	680.7	803.8
35°	1362.4	1362.6	1330.4	1250.3	1121.8	965.5	811.1	697.9	709.0	732.7	866.7
37.5°	1445.4	1455.4	1443.4	1361.8	1233.5	1062.8	901.7	774.2	767.1	791.0	934.1
40°	1463.2	1475.4	1513.6	1472.1	1358.4	1169.9	981.9	847.5	838.6	867.8	1020.9
42.5°	1438.3	1455.3	1535.9	1565.1	1491.1	1301.9	1089.8	956.4	945.2	984.5	1128.8
45°	1423.4	1436.1	1529.4	1613.6	1606.1	1451.1	1227.2	1093.2	1089.0	1140.6	1253.3
47.5°	1397.8	1409.3	1499.0	1624.9	1673.7	1587.9	1392.3	1260.4	1268.5	1336.1	1393.8
50°	1411.6	1416.3	1465.0	1596.2	1693.3	1688.1	1576.6	1454.1	1481.8	1566.2	1552.9
52.5°	1409.6	1421.9	1461.0	1549.2	1695.8	1750.0	1758.3	1670.1	1728.5	1825.3	1729.4
55°	1139.7	1162.2	1414.6	1537.3	1704.9	1810.6	1920.0	1897.8	2006.5	2119.4	1928.6
57.5°	1088.3	1102.5	1242.4	1562.2	1753.1	1926.5	2099.8	2148.4	2330.2	2461.3	2171.4
60°	1078.1	1095.7	1240.6	1592.7	1851.0	2115.2	2366.4	2451.8	2724.2	2867.7	2452.8
62.5°	1046.7	1065.7	1228.9	1588.7	1989.9	2376.3	2707.8	2774.4	3097.7	3237.3	2688.2
65°	947.1	964.9	1133.9	1524.9	2083.6	2655.0	3111.7	3070.1	3392.6	3497.5	2805.6
66°	878.9	896.3	1059.0	1449.8	2061.8	2734.1	3254.9	3161.6	3458.6	3540.9	2782.7
67.5°	754.2	767.8	913.5	1281.5	1946.2	2756.2	3375.2	3230.3	3465.5	3494.6	2651.7
70°	476.5	480.5	593.7	884.7	1473.3	2390.3	3192.0	3059.6	3179.8	3101.1	2222.9
72.5°	206.8	205.4	285.0	450.0	834.1	1603.9	2582.1	2524.6	2494.3	2314.9	1556.1
75°	115.0	116.6	148.1	208.9	339.0	787.8	1689.1	1616.4	1364.7	1164.6	705.6
77.5°	92.3	94.5	122.7	148.2	152.2	274.7	790.4	643.1	387.2	310.7	196.0
80°	72.9	76.9	107.1	115.4	102.6	113.2	255.4	204.2	153.2	140.5	101.6
82.5°	57.7	60.5	91.9	87.4	71.8	76.3	122.3	119.2	99.6	90.7	58.7
85°	41.5	46.6	75.5	65.8	47.0	51.4	81.2	77.9	57.1	46.6	25.9
87.5°	17.0	22.1	53.4	43.7	26.3	23.9	40.5	38.1	27.0	19.7	12.9
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	596.1	596.1	596.1	596.1	596.1	596.1	596.1	596.1	596.1	596.1	596.1
2.5°	595.5	600.2	606.4	610.2	612.1	613.5	615.7	615.5	616.1	616.3	617.0
5°	599.5	607.3	616.3	618.7	618.7	616.4	614.3	610.7	609.3	609.0	609.3
7.5°	609.7	618.4	626.1	623.4	617.5	608.7	597.5	587.6	582.3	580.5	580.1
10°	622.8	633.3	636.4	626.0	608.5	587.6	565.3	549.1	539.8	537.2	536.4
12.5°	638.6	648.5	644.2	622.0	589.8	556.0	525.1	499.3	479.9	473.8	473.4
15°	656.0	663.7	648.5	609.7	561.7	511.9	457.0	412.3	388.2	380.5	379.9
17.5°	672.2	676.2	645.9	588.4	520.4	439.8	366.8	332.4	324.2	326.1	326.5
20°	686.0	686.0	637.2	557.7	455.4	344.7	298.6	298.1	304.0	309.9	311.1
22.5°	701.2	692.1	622.0	514.5	363.2	282.0	275.3	280.8	287.5	294.1	295.1
25°	720.0	697.1	600.8	448.9	285.6	256.1	258.7	263.3	266.6	270.8	271.4
27.5°	741.0	703.4	573.0	358.5	247.9	240.0	241.9	243.5	243.1	244.7	245.1
30°	766.1	710.8	534.8	280.2	232.3	226.1	222.6	221.2	221.2	223.8	224.7
32.5°	799.7	721.6	480.1	240.2	224.7	216.2	204.8	199.6	201.6	210.3	212.3
35°	836.7	733.3	406.0	226.5	223.2	211.7	193.9	184.4	184.6	192.7	195.3
37.5°	876.9	748.1	324.7	223.9	226.7	211.9	188.1	175.1	169.8	169.8	170.8
40°	928.5	763.3	262.9	225.7	234.2	214.2	185.2	167.8	152.8	153.2	154.0
42.5°	995.7	776.3	229.7	229.4	243.3	217.4	185.0	158.1	145.1	154.0	162.1
45°	1070.5	782.9	215.0	232.9	250.6	219.4	181.9	156.6	146.1	172.5	188.0
47.5°	1156.4	779.1	206.9	234.0	252.4	219.4	178.3	160.3	153.0	199.8	217.8
50°	1250.7	768.3	199.0	231.7	251.8	219.0	181.6	164.0	155.5	204.5	217.0
52.5°	1361.6	759.2	190.7	226.5	247.6	216.8	185.6	162.5	147.5	186.0	194.7
55°	1488.1	761.7	181.4	219.2	241.1	212.7	184.2	156.1	139.0	163.9	169.2
57.5°	1649.8	792.4	170.4	209.9	232.3	205.7	179.3	153.2	136.4	148.7	151.8
60°	1830.2	845.7	156.6	200.6	221.2	194.7	175.5	154.6	137.6	147.5	149.0
62.5°	1962.6	876.8	144.7	187.0	206.2	182.4	170.8	156.3	140.8	151.6	151.2
65°	1998.6	825.8	129.9	167.0	185.8	169.6	164.8	158.3	142.1	154.9	153.2
66°	1948.2	770.8	123.3	157.7	175.5	163.3	161.9	158.1	141.5	155.4	152.4
67.5°	1825.9	658.2	112.1	144.1	159.1	153.8	157.1	156.3	139.9	154.9	150.8
70°	1489.1	449.1	95.9	120.0	132.4	135.4	148.1	150.0	134.8	148.1	139.0
72.5°	1040.4	273.5	84.8	93.1	107.1	115.4	135.6	141.3	127.9	129.3	120.6
75°	502.8	145.3	76.9	72.2	83.2	96.5	120.6	129.4	117.0	108.1	105.0
77.5°	156.7	88.7	65.2	58.1	65.2	77.9	100.8	113.5	104.2	90.5	89.3
80°	84.2	65.2	50.2	46.6	51.6	61.1	79.2	94.7	89.5	81.2	72.5
82.5°	55.5	42.3	37.2	36.1	39.3	46.6	58.9	78.5	78.5	69.6	50.6
85°	28.7	25.9	25.5	25.5	27.5	31.1	40.1	60.5	64.5	36.7	30.5
87.5°	14.2	14.8	13.8	14.4	15.4	15.2	19.1	30.5	36.4	22.3	18.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)