

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: P191777

Luminaire Tested: **GLEON-AF-09-LED-E1-AFL-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191777
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-09-LED-E1-AFL-7050
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 5000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 54593 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B4 - U0 - G4

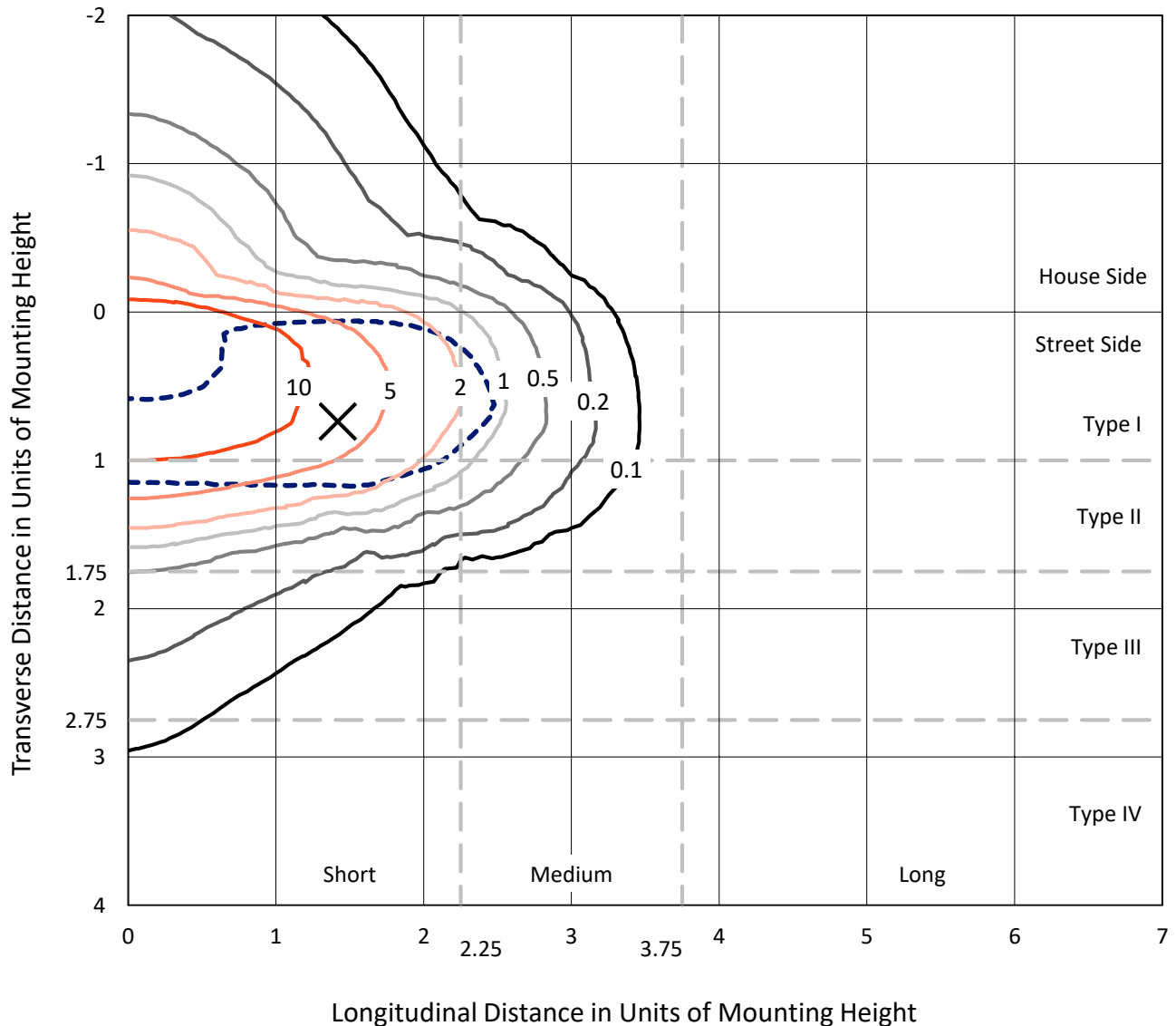
Input Watts (W): 501
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P191777
 CATALOG NUMBER: GLEON-AF-09-LED-E1-AFL-7050

Iso-Footcandle Lines of Horizontal Illumination

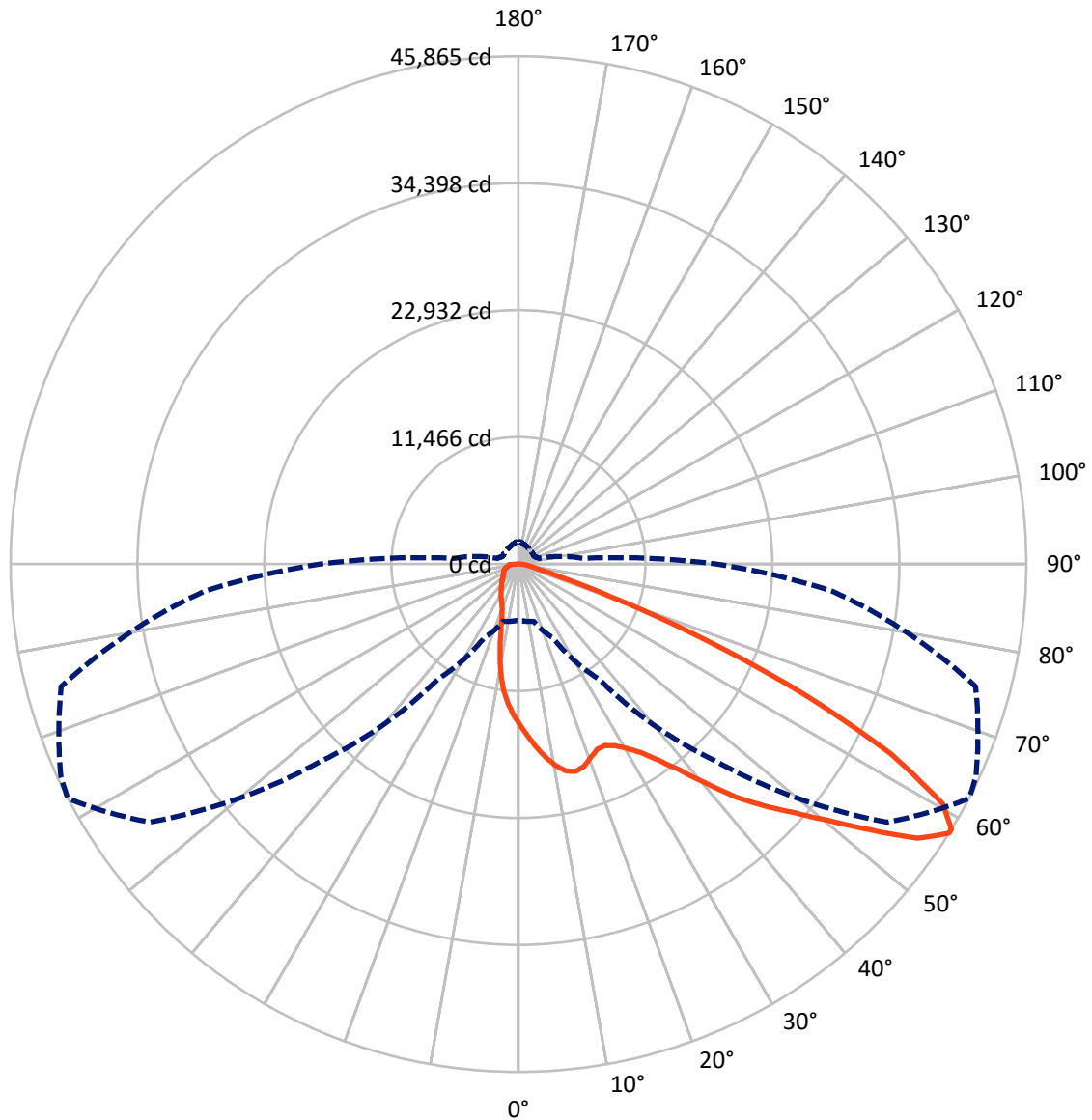
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 19.6 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P191777
CATALOG NUMBER: GLEON-AF-09-LED-E1-AFL-7050

Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral - - - Horizontal Cone Through 58-Deg Vertical

REPORT NUMBER: P191777

CATALOG NUMBER: GLEON-AF-09-LED-E1-AFL-7050

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8325.7	0.0	8325.7
	% Fixture	15.3	0.0	15.3
Street Side	Lumens	46267.4	0.0	46267.4
	% Fixture	84.7	0.0	84.7
Total	Lumens	54593.0	0.0	54593.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1297.0	2.4
10°-20°	3315.2	6.1
20°-30°	5359.1	9.8
30°-40°	8507.6	15.6
40°-50°	12448.4	22.8
50°-60°	13019.9	23.8
60°-70°	7692.2	14.1
70°-80°	2166.9	4.0
80°-90°	786.7	1.4
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°	54593.0	100.0
0°-180°	54593.0	100.0



REPORT NUMBER: P191777

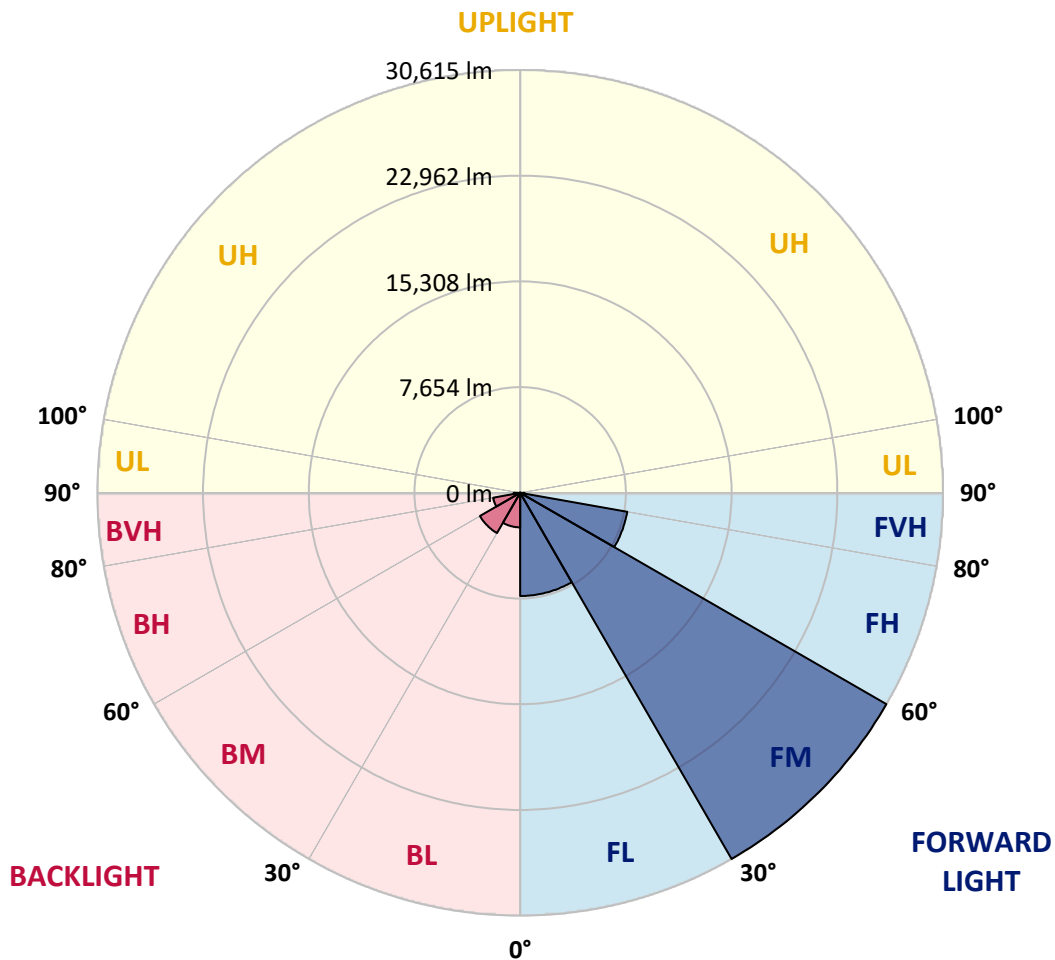
CATALOG NUMBER: GLEON-AF-09-LED-E1-AFL-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	7469.0	13.7			
FM (30°-60°)	30615.5	56.1			
FH (60°-80°)	7872.5	14.4			G4/12000
FVH (80°-90°)	310.4	0.6			G3/500
BL (0°-30°)	2502.3	4.6	B4/5000		
BM (30°-60°)	3360.4	6.2	B3/5000		
BH (60°-80°)	1986.6	3.6	B3/2500		G3/2500
BVH (80°-90°)	476.4	0.9			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short





REPORT NUMBER: P191777
 CATALOG NUMBER: GLEON-AF-09-LED-E1-AFL-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	14501.5	14501.5	14501.5	14501.5	14501.5	14501.5	14501.5	14501.5	14501.5	14501.5	14501.5
2.5°	16571.0	16437.3	16352.4	16277.9	16180.2	15972.0	15691.8	15514.4	15424.4	15118.5	14756.0
5°	18195.7	18077.4	17990.0	17889.7	17714.9	17388.5	16936.0	16576.1	16398.7	15786.9	15061.9
7.5°	17815.2	17864.0	18015.7	18280.5	18506.7	18463.0	18059.4	17601.8	17367.9	16517.0	15416.7
10°	15522.1	15606.9	15869.1	16488.7	17491.3	18519.6	18833.2	18517.0	18280.5	17239.4	15781.7
12.5°	15061.9	15059.4	15079.9	15244.5	15840.9	17288.2	18858.9	19177.7	19036.3	17928.3	16154.5
15°	15249.6	15254.7	15239.3	15308.7	15493.8	16067.1	18072.3	19432.2	19532.4	18622.4	16540.1
17.5°	15743.2	15730.3	15671.2	15671.2	15738.0	15961.7	17146.8	19195.7	19658.4	19236.8	16879.4
20°	16571.0	16511.8	16355.0	16211.1	16139.1	16259.9	16766.3	18650.7	19439.9	19774.1	17159.7
22.5°	17573.5	17527.3	17272.8	16964.3	16714.9	16712.4	16961.7	18175.1	19062.0	20280.5	17396.2
25°	18869.2	18794.6	18416.7	17923.2	17486.1	17319.0	17388.5	18152.0	18856.3	20830.7	17607.0
27.5°	20391.1	20254.8	19807.5	19095.4	18452.7	18116.0	18015.7	18571.0	19044.0	21511.9	17900.0
30°	22236.9	22080.0	21506.8	20578.7	19671.3	19118.6	18905.2	19313.9	19666.1	22342.3	18370.5
32.5°	24337.2	24110.9	23447.7	22424.5	21231.7	20388.5	20041.5	20296.0	20576.2	23342.3	18959.2
35°	27239.5	26969.6	26010.7	24599.4	23252.3	22092.9	21537.6	21722.7	21995.2	24833.3	19810.1
37.5°	29219.0	29098.2	28460.6	27134.1	25668.8	24334.6	23476.0	23583.9	23738.2	26697.1	20900.1
40°	29201.0	29249.8	29262.7	29275.5	28278.1	27000.4	26077.5	25964.4	25933.6	28743.4	22139.2
42.5°	27738.2	27938.8	28586.6	29900.2	30506.9	29920.8	29075.0	28748.5	28586.6	31154.7	23452.8
45°	25499.1	25607.1	26820.5	29386.1	31648.3	32812.9	32172.8	31144.5	30851.4	33370.7	24542.8
47.5°	24344.9	24463.1	25226.6	28023.6	31635.5	35149.7	35519.9	33561.0	33036.5	35298.8	25483.7
50°	21596.7	21843.5	22805.0	25653.4	30481.2	36224.2	39018.6	36440.2	35355.3	37175.4	26427.2
52.5°	16550.4	16930.9	18008.0	21756.1	27553.1	35692.1	41818.2	39931.2	38399.1	39118.9	27236.9
55°	10439.8	10722.5	11627.4	15365.3	22041.5	32923.4	42879.9	43707.6	42345.2	40959.5	27938.8
57.5°	5676.2	5802.1	6141.5	8483.4	14337.0	26802.5	41332.3	45856.8	45291.2	42522.5	28468.3
58°	5079.8	5164.6	5375.4	7352.3	12714.9	25128.9	40645.9	45864.5	45581.7	42751.3	28509.5
60°	3768.7	3725.0	3537.3	4195.4	7077.2	17360.2	36496.7	44029.0	44859.3	43031.5	28308.9
62.5°	3311.1	3205.7	2822.7	2779.0	3442.2	7997.6	27925.9	37715.3	39676.7	41432.5	27090.4
65°	3110.6	2997.5	2503.9	2344.5	2483.3	3383.1	16450.1	28285.8	30746.0	36584.1	23974.7
67.5°	2961.5	2815.0	2300.8	2082.3	2092.6	2236.5	6593.9	17815.2	20583.9	27776.8	18648.1
70°	2817.5	2658.1	2128.6	1876.6	1817.5	1768.7	2622.2	8917.9	11429.5	17545.3	11889.7
72.5°	2663.3	2506.5	1976.9	1714.7	1599.0	1437.0	1712.1	3647.9	5095.2	8300.9	5393.4
75°	2439.6	2298.2	1825.2	1570.7	1406.2	1190.3	1293.1	1904.9	2285.4	3306.0	2599.0
77.5°	2164.6	2048.9	1655.6	1452.5	1246.8	966.6	994.9	1321.4	1465.3	1892.1	1545.0
80°	1555.3	1596.4	1473.0	1305.9	1110.6	784.1	763.5	964.0	1041.1	1216.0	1005.2
82.5°	1092.6	1115.7	1218.5	1066.9	917.8	617.0	563.0	678.7	724.9	799.5	542.4
85°	753.2	727.5	835.5	742.9	663.2	411.3	385.6	460.2	488.4	496.2	280.2
87.5°	452.4	452.4	483.3	398.5	357.3	213.4	208.2	262.2	280.2	267.4	154.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P191777
 CATALOG NUMBER: GLEON-AF-09-LED-E1-AFL-7050

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	14501.5	14501.5	14501.5	14501.5	14501.5	14501.5	14501.5	14501.5	14501.5	14501.5	14501.5
2.5°	14540.1	14357.6	13969.4	13658.3	13265.0	12856.2	12627.5	12383.2	12216.1	12095.3	12288.1
5°	14650.6	14277.9	13475.8	12714.9	11874.2	11000.2	10336.9	9720.0	9290.6	9023.3	9275.2
7.5°	14825.4	14252.2	12974.5	11673.7	10164.7	8709.7	7408.9	6593.9	6118.4	5884.4	6030.9
10°	15025.9	14211.0	12385.8	10262.4	8103.0	6270.0	5298.3	4969.2	4861.3	4817.6	4838.1
12.5°	15193.0	14123.6	11663.4	8555.4	6084.9	4951.2	4671.0	4663.3	4686.5	4691.6	4699.3
15°	15311.3	13995.1	10591.4	6776.5	4866.4	4511.6	4496.2	4542.5	4586.2	4604.2	4614.5
17.5°	15391.0	13730.3	9380.6	5357.4	4360.0	4298.3	4334.3	4393.4	4439.7	4452.5	4462.8
20°	15383.3	13342.1	7938.4	4467.9	4084.9	4084.9	4146.6	4192.9	4195.4	4180.0	4187.7
22.5°	15303.6	12810.0	6540.0	3994.9	3840.7	3884.4	3946.1	3902.4	3722.4	3604.2	3611.9
25°	15169.9	12175.0	5342.0	3694.1	3614.5	3691.6	3673.6	3344.5	3087.5	2971.8	2971.8
27.5°	15051.7	11424.3	4421.7	3431.9	3388.2	3483.3	3164.6	2866.4	2758.4	2704.4	2686.4
30°	14966.8	10614.6	3807.3	3180.0	3174.9	3105.4	2745.5	2663.3	2645.3	2601.6	2586.2
32.5°	14987.4	9794.5	3413.9	2958.9	2976.9	2658.1	2545.0	2563.0	2547.6	2501.3	2480.8
35°	15157.1	9015.6	3156.9	2758.4	2704.4	2401.1	2426.8	2460.2	2455.1	2390.8	2370.2
37.5°	15460.4	8277.8	2987.2	2591.3	2359.9	2272.5	2313.7	2365.1	2352.2	2308.5	2293.1
40°	15779.2	7583.7	2848.4	2460.2	2156.8	2185.1	2221.1	2249.4	2262.2	2275.1	2264.8
42.5°	16090.2	6858.7	2678.7	2326.5	2072.0	2102.9	2118.3	2146.6	2216.0	2264.8	2262.2
45°	16275.3	6177.5	2503.9	2136.3	2005.2	2023.2	2012.9	2069.4	2154.3	2234.0	2236.5
47.5°	16481.0	5647.9	2365.1	1961.5	1940.9	1953.8	1922.9	1979.5	2056.6	2154.3	2164.6
50°	16730.3	5331.7	2254.5	1822.7	1853.5	1853.5	1845.8	1897.2	2005.2	2118.3	2138.9
52.5°	17013.1	5270.0	2162.0	1722.4	1766.1	1763.5	1771.2	1848.4	1966.6	2077.2	2095.1
55°	17357.6	5437.1	2061.7	1647.8	1681.3	1691.5	1717.3	1804.7	1904.9	2030.9	2038.6
57.5°	17758.6	5776.4	1982.0	1588.7	1604.1	1637.6	1678.7	1758.4	1866.4	2005.2	2012.9
58°	17825.5	5848.4	1969.2	1583.6	1588.7	1627.3	1673.5	1750.7	1858.6	2010.3	2018.0
60°	17828.1	6087.5	1940.9	1560.4	1529.6	1593.9	1645.3	1722.4	1845.8	2028.3	2046.3
62.5°	17195.6	6084.9	1920.3	1527.0	1467.9	1547.6	1606.7	1696.7	1832.9	2072.0	2108.0
65°	15141.6	5529.7	1822.7	1475.6	1419.0	1506.5	1573.3	1678.7	1868.9	2262.2	2285.4
67.5°	11843.4	4532.2	1640.1	1403.6	1354.8	1465.3	1552.7	1676.1	1907.5	2305.9	2321.4
70°	7830.5	3390.8	1439.6	1321.4	1287.9	1416.5	1563.0	1763.5	1863.8	2213.4	2172.3
72.5°	4064.3	2380.5	1277.7	1218.5	1210.8	1372.8	1712.1	1753.2	1820.1	2082.3	2030.9
75°	2133.7	1653.0	1136.3	1105.4	1118.3	1362.5	2020.6	1707.0	1763.5	1992.3	2090.0
77.5°	1305.9	1334.2	1015.4	1002.6	1028.3	1331.6	2018.0	1647.8	1681.3	1832.9	1940.9
80°	874.1	1082.3	922.9	925.5	943.5	1218.5	1812.4	1555.3	1581.0	1732.7	1843.2
82.5°	552.7	640.1	838.1	881.8	858.6	1005.2	1539.9	1416.5	1452.5	1982.0	2095.1
85°	280.2	401.0	727.5	848.3	773.8	704.4	1249.4	1241.7	1259.7	1429.3	1493.6
87.5°	128.5	221.1	568.1	740.4	583.6	439.6	907.5	920.3	992.3	1015.4	1015.4
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)