

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: STREETWORKS

Report Number: P321066

Luminaire Tested: **GAN-SA2A-827-U-AFL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321066
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-29)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-SA2A-827-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7191 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

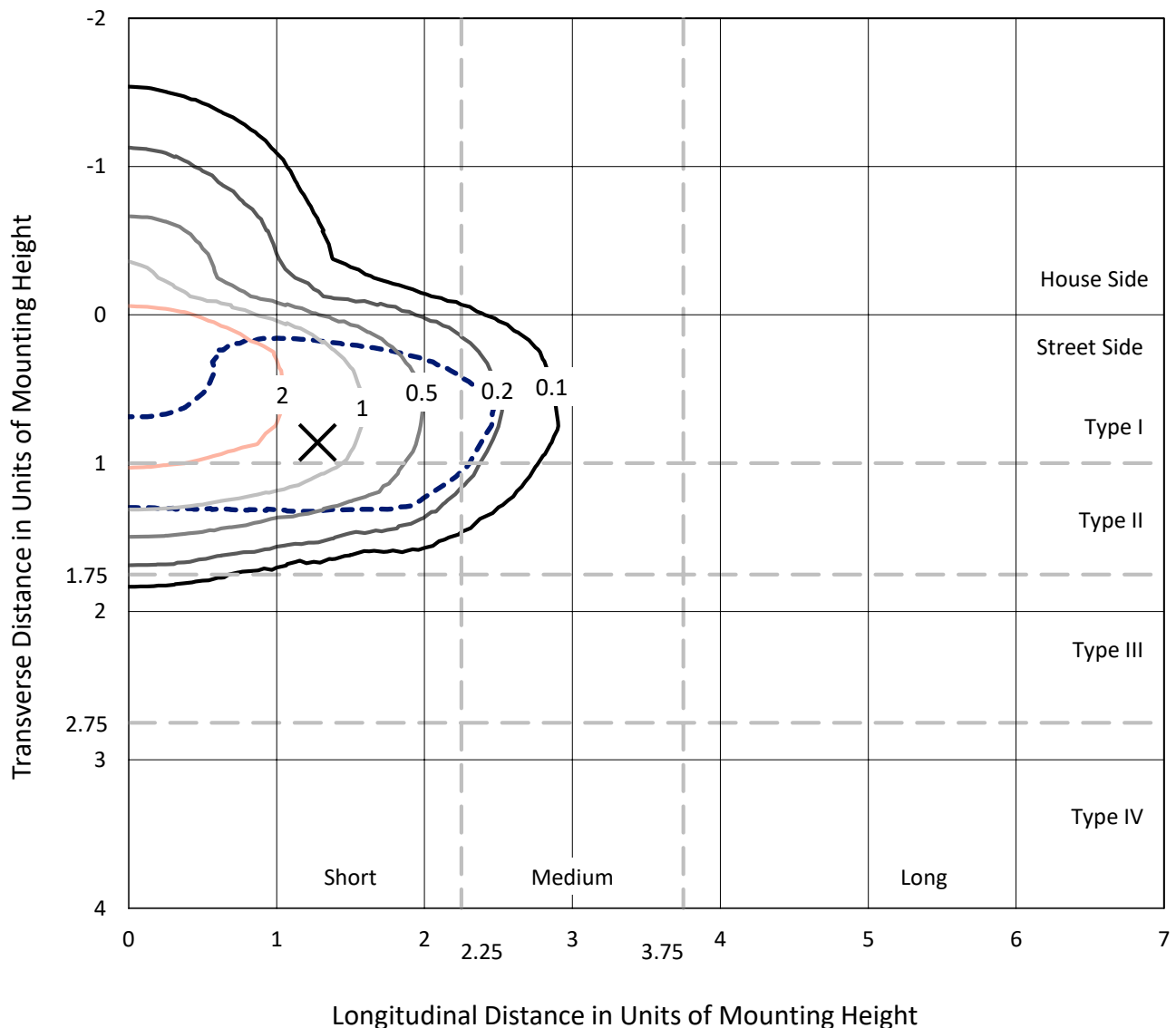
Input Watts (W): 66
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

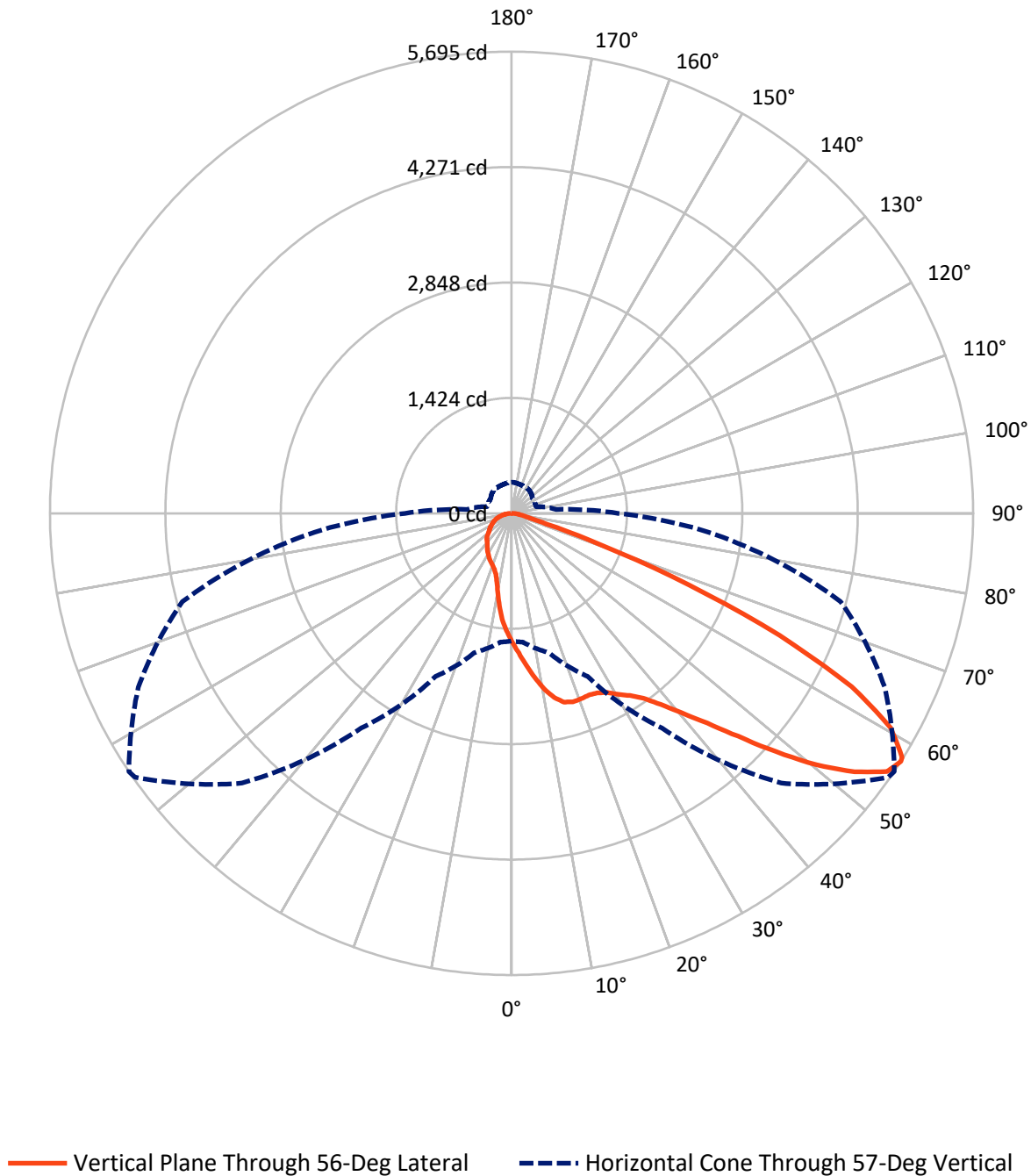
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1239.6	0.0	1239.6
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	5951.4	0.0	5951.4
	% Fixture	82.8	0.0	82.8
Total	Lumens	7191.0	0.0	7191.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.4	2.1
10°-20°	430.8	6.0
20°-30°	701.6	9.8
30°-40°	1048.8	14.6
40°-50°	1590.9	22.1
50°-60°	1783.1	24.8
60°-70°	1053.2	14.6
70°-80°	345.1	4.8
80°-90°	85.3	1.2
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°	7191.0	100.0
0°-180°	7191.0	100.0

Coefficient of Utilization



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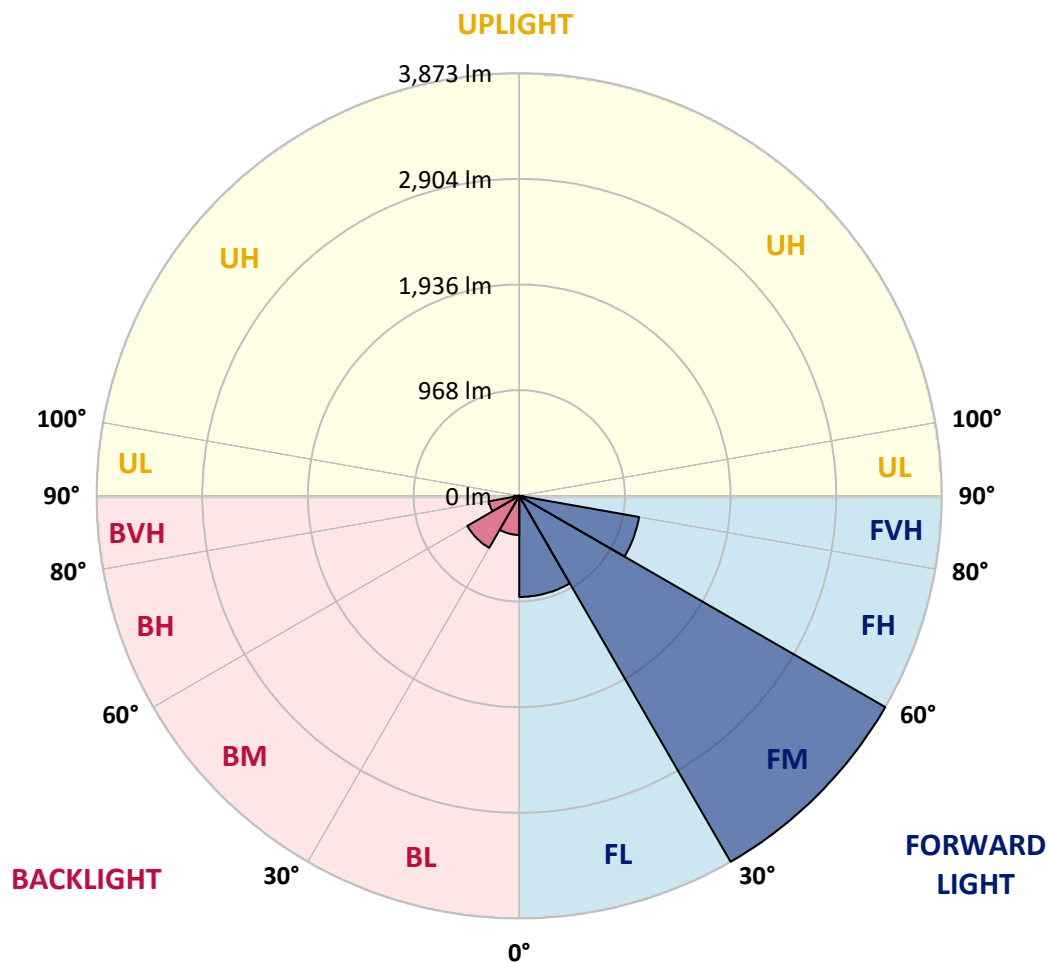
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	926.3	12.9			
FM	(30°-60°)	3872.6	53.9			
FH	(60°-80°)	1115.0	15.5			G1/1800
FVH	(80°-90°)	37.5	0.5			G1/100
BL	(0°-30°)	358.4	5.0	B1/500		
BM	(30°-60°)	550.2	7.7	B1/1000		
BH	(60°-80°)	283.2	3.9	B1/500		G1/500
BVH	(80°-90°)	47.7	0.7			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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	1595.0	1595.0	1595.0	1595.0	1595.0	1595.0	1595.0	1595.0	1595.0	1595.0	1595.0
2.5°	1831.5	1848.3	1840.9	1815.2	1795.4	1767.5	1736.3	1726.9	1694.1	1657.2	1613.0
5°	2121.4	2113.0	2100.8	2060.8	2018.5	1969.4	1891.3	1878.9	1805.8	1722.5	1634.5
7.5°	2286.4	2285.7	2278.5	2255.1	2216.5	2152.2	2058.1	2043.5	1933.0	1799.1	1662.7
10°	2262.5	2260.7	2272.6	2297.1	2308.7	2295.3	2216.0	2201.4	2065.8	1883.9	1695.3
12.5°	2126.3	2127.3	2146.3	2197.7	2267.7	2351.7	2338.8	2331.7	2203.4	1979.8	1734.8
15°	2020.3	2022.5	2037.6	2082.3	2164.8	2317.3	2413.5	2415.9	2336.6	2085.5	1781.1
17.5°	1973.8	1978.5	1985.4	2016.8	2092.4	2248.9	2431.3	2444.6	2453.2	2195.2	1825.5
20°	1988.6	1993.1	1995.1	2015.1	2077.1	2207.4	2418.9	2442.9	2542.7	2298.5	1870.0
22.5°	2055.1	2057.8	2059.1	2064.3	2112.5	2219.2	2410.7	2436.0	2607.5	2391.2	1903.6
25°	2165.3	2163.4	2155.5	2148.8	2181.2	2266.2	2429.5	2453.5	2660.1	2475.2	1925.6
27.5°	2297.3	2294.8	2279.5	2261.2	2279.8	2339.3	2483.6	2502.7	2707.3	2553.8	1936.7
30°	2455.7	2449.3	2420.4	2398.6	2405.8	2449.0	2572.9	2590.2	2780.2	2643.0	1947.6
32.5°	2638.8	2631.9	2590.2	2554.1	2554.1	2590.2	2664.8	2679.1	2842.0	2743.9	1965.2
35°	2868.2	2859.5	2805.2	2744.6	2727.6	2745.8	2790.1	2800.2	2953.2	2870.9	1997.0
37.5°	3138.5	3126.9	3056.5	2975.4	2938.1	2937.1	2969.0	2989.8	3130.9	3037.7	2051.2
40°	3409.6	3401.5	3339.9	3276.2	3203.0	3179.6	3228.7	3235.2	3363.2	3244.8	2120.4
42.5°	3619.2	3617.7	3606.4	3614.8	3539.9	3492.4	3531.0	3536.2	3646.9	3468.9	2194.0
45°	3729.9	3732.4	3787.5	3909.6	3937.3	3902.7	3921.7	3923.2	3971.1	3695.1	2261.5
47.5°	3641.2	3654.0	3793.4	4066.5	4293.1	4408.0	4376.4	4394.7	4285.5	3889.3	2314.4
50°	3295.5	3311.3	3548.5	3996.6	4459.2	4897.1	4880.5	4876.3	4539.0	4031.7	2343.0
52.5°	2867.2	2879.5	3075.3	3633.0	4337.4	5167.5	5319.5	5297.7	4764.4	4138.2	2348.5
55°	2215.0	2234.3	2421.9	2907.5	3844.6	5064.2	5642.2	5622.7	4969.8	4194.0	2342.0
57°	1574.7	1595.0	1781.3	2219.0	3234.2	4706.6	5674.3	5695.1	5080.7	4203.4	2349.2
57.5°	1405.2	1425.9	1610.5	2035.6	3043.9	4577.3	5646.6	5681.2	5100.7	4201.9	2353.2
60°	707.5	715.4	833.1	1136.3	1924.1	3700.5	5285.6	5374.8	5118.8	4129.3	2370.2
62.5°	439.9	434.2	430.5	523.4	936.1	2454.0	4540.5	4712.3	4773.5	3953.3	2328.9
65°	386.8	376.1	335.4	327.9	413.4	1191.9	3419.3	3633.0	4035.9	3676.0	2230.6
67.5°	363.3	352.9	306.9	279.3	279.5	472.5	2122.8	2363.5	3144.0	3207.2	1998.5
70°	339.1	329.7	286.7	254.0	238.0	261.7	976.7	1159.3	2049.4	2521.0	1670.3
72.5°	307.9	301.5	260.7	227.1	210.1	196.0	373.9	441.6	1186.5	1693.1	1160.0
75°	275.3	269.4	234.5	202.4	181.6	154.2	210.6	226.9	602.7	866.2	571.1
77.5°	239.5	236.0	208.6	178.9	162.4	127.8	149.0	156.9	258.5	371.4	286.4
80°	190.5	197.2	182.4	159.4	144.1	102.3	105.5	110.7	150.5	181.4	162.6
82.5°	124.1	135.7	142.8	129.5	118.6	80.6	75.9	78.1	98.1	110.7	70.7
85°	51.6	58.1	93.9	84.8	78.8	58.8	50.9	51.9	60.8	63.0	28.9
87.5°	23.0	24.5	41.3	38.8	33.4	20.3	21.7	23.7	32.4	30.6	11.1
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°	1595.0	1595.0	1595.0	1595.0	1595.0	1595.0	1595.0	1595.0	1595.0	1595.0	1595.0
2.5°	1596.5	1575.7	1540.1	1500.8	1468.7	1443.0	1417.0	1399.2	1378.5	1367.4	1361.7
5°	1597.7	1556.9	1482.0	1405.2	1336.5	1273.7	1213.9	1167.9	1124.9	1101.7	1095.3
7.5°	1602.9	1541.6	1420.5	1294.0	1171.9	1060.4	974.4	920.6	881.8	864.5	859.5
10°	1607.1	1523.6	1344.4	1157.1	991.0	878.0	811.3	781.2	767.8	765.6	763.4
12.5°	1617.0	1505.0	1264.3	1014.2	850.4	772.3	749.0	747.1	750.8	756.2	756.2
15°	1632.5	1486.7	1172.9	891.6	760.9	733.5	738.2	749.0	759.2	767.6	768.8
17.5°	1643.9	1464.2	1074.5	793.5	713.2	720.6	737.4	752.8	763.1	771.3	772.0
20°	1652.1	1429.4	969.5	718.7	685.8	708.8	729.8	743.4	750.5	758.7	759.9
22.5°	1647.9	1382.7	876.3	665.0	663.5	691.5	711.5	727.8	722.4	714.4	719.6
25°	1627.6	1318.4	780.4	625.0	640.1	668.2	692.9	682.1	663.8	660.3	662.3
27.5°	1591.5	1236.4	691.7	587.9	612.9	646.7	645.3	634.4	628.0	623.5	626.2
30°	1552.7	1147.4	614.1	555.5	582.7	610.7	605.0	604.7	598.3	591.1	594.6
32.5°	1514.4	1058.0	552.6	528.9	560.0	563.7	576.1	579.8	567.2	552.1	551.1
35°	1481.0	973.4	505.9	504.6	532.6	533.1	551.1	545.9	514.5	499.0	499.0
37.5°	1456.1	889.2	470.3	482.9	496.5	509.3	518.5	497.0	491.8	483.1	482.9
40°	1445.2	815.0	448.0	466.3	471.0	487.3	463.9	472.3	474.7	470.3	470.3
42.5°	1433.8	750.5	428.8	453.7	453.0	450.8	438.9	449.8	459.7	459.9	459.2
45°	1422.5	694.9	411.7	426.8	437.2	413.2	415.4	427.0	440.9	445.8	445.8
47.5°	1409.9	650.9	396.1	398.4	414.4	398.4	396.6	405.5	421.8	429.8	431.5
50°	1382.2	611.4	378.4	373.4	377.9	383.3	384.8	389.0	407.0	419.6	422.6
52.5°	1343.9	576.1	355.6	350.4	350.4	370.9	377.9	379.1	394.4	409.5	412.5
55°	1312.0	553.6	332.1	331.2	330.2	357.8	369.7	371.7	382.3	394.2	395.7
57°	1314.2	551.8	314.1	315.1	314.8	344.5	362.0	366.2	371.7	381.8	383.5
57.5°	1315.5	553.1	310.1	310.6	310.4	340.8	359.8	364.5	368.7	379.3	381.1
60°	1334.0	556.3	294.1	288.6	289.9	321.0	347.2	353.1	355.9	370.0	372.2
62.5°	1306.6	542.0	281.2	268.1	268.1	300.3	329.7	339.1	343.3	362.3	366.0
65°	1227.0	501.7	266.2	244.9	247.4	279.5	308.7	324.0	330.4	354.1	358.1
67.5°	1104.2	455.0	250.1	224.1	226.6	257.8	286.9	303.5	313.6	345.2	348.5
70°	944.3	397.9	228.3	202.2	205.1	234.0	261.2	280.0	295.1	336.8	337.8
72.5°	696.2	326.2	198.0	177.9	181.1	206.4	235.3	257.0	277.3	315.8	315.3
75°	413.9	255.0	164.3	153.5	155.7	179.2	211.8	238.2	268.6	307.7	312.4
77.5°	251.1	192.0	133.9	128.5	131.2	155.2	195.0	223.2	264.9	290.1	288.6
80°	151.7	137.2	107.0	103.5	106.3	132.7	180.4	211.8	231.6	247.9	247.9
82.5°	79.3	83.8	78.6	75.9	79.6	107.7	164.1	184.9	204.6	175.7	164.1
85°	32.4	43.7	47.7	47.4	49.7	74.6	141.6	158.2	132.0	125.3	128.3
87.5°	10.9	18.5	23.2	20.0	21.0	47.0	98.1	76.4	90.7	63.3	60.1
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)