

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: P651280

Luminaire Tested: **GALN-SA3D-840-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651280
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA3D-840-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19612.1 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

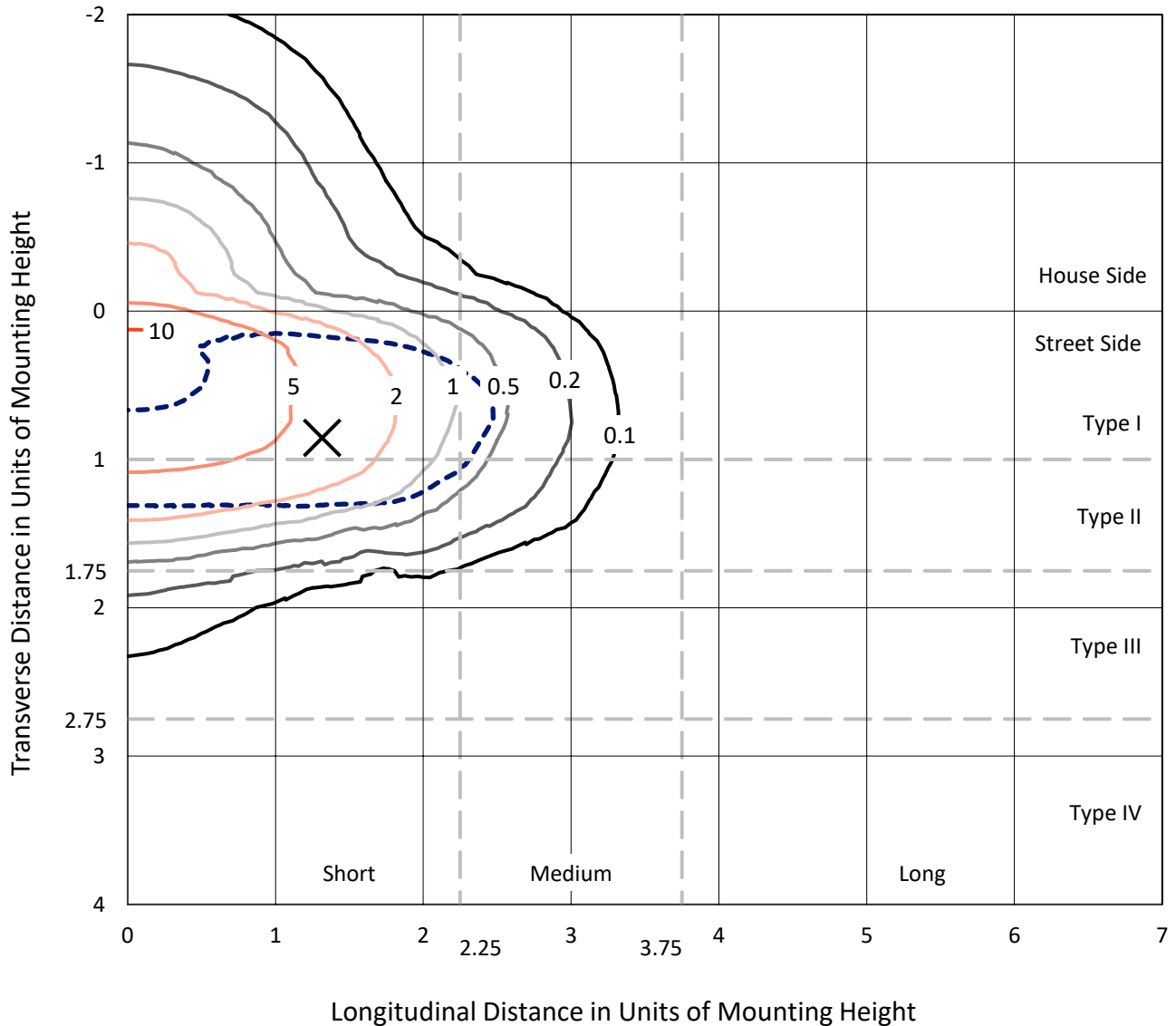
Input Watts (W): 184
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

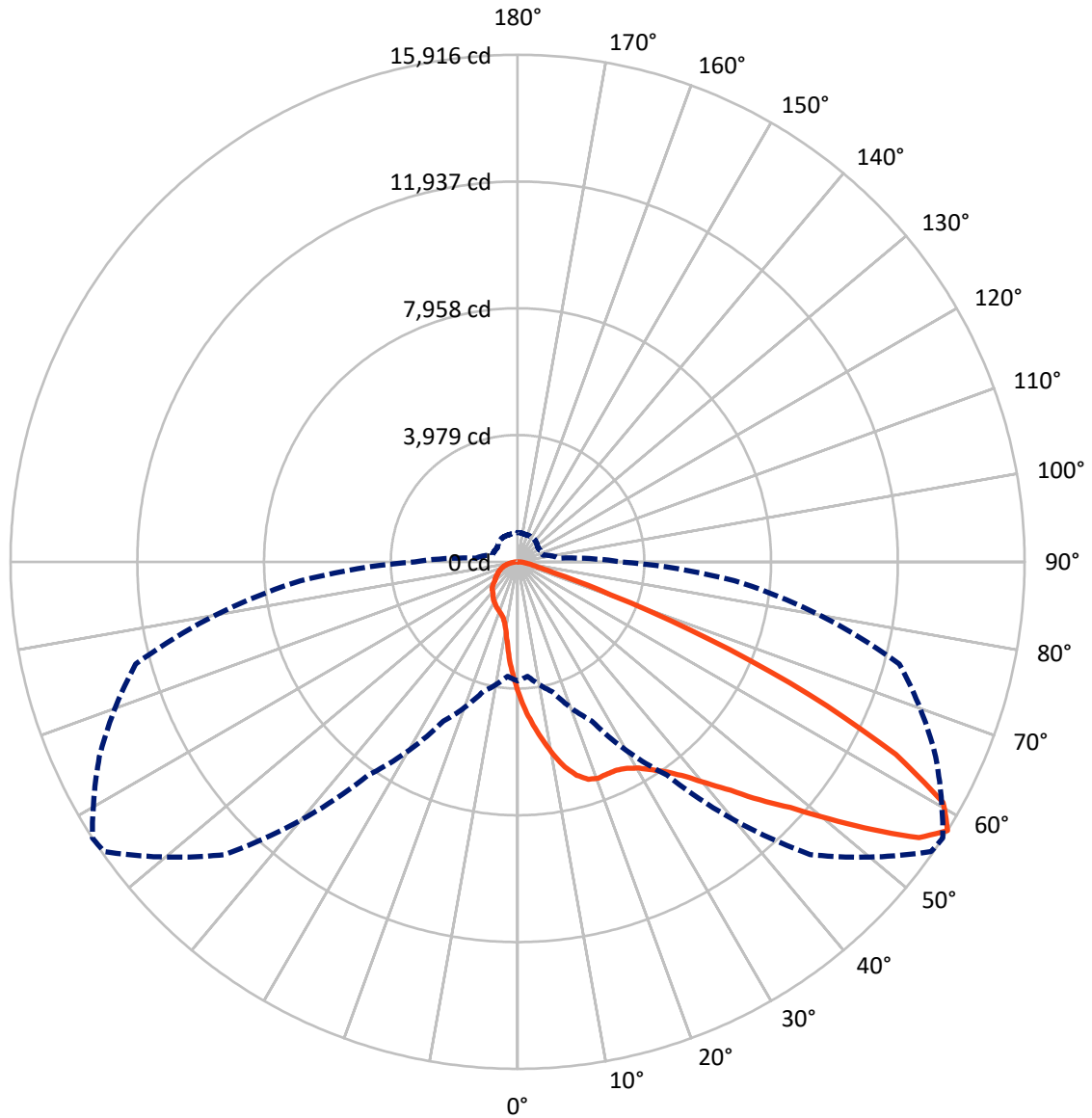
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2982.4	0.0	2982.4
	% Fixture	15.2	0.0	15.2
Street Side	Lumens	16629.7	0.0	16629.7
	% Fixture	84.8	0.0	84.8
Total	Lumens	19612.1	0.0	19612.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	396.0	2.0
10°-20°	1167.0	6.0
20°-30°	1937.9	9.9
30°-40°	2919.0	14.9
40°-50°	4382.6	22.3
50°-60°	4912.4	25.0
60°-70°	2875.0	14.7
70°-80°	850.4	4.3
80°-90°	171.9	0.9
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°	19612.1	100.0
0°-180°	19612.1	100.0

Coefficient of Utilization

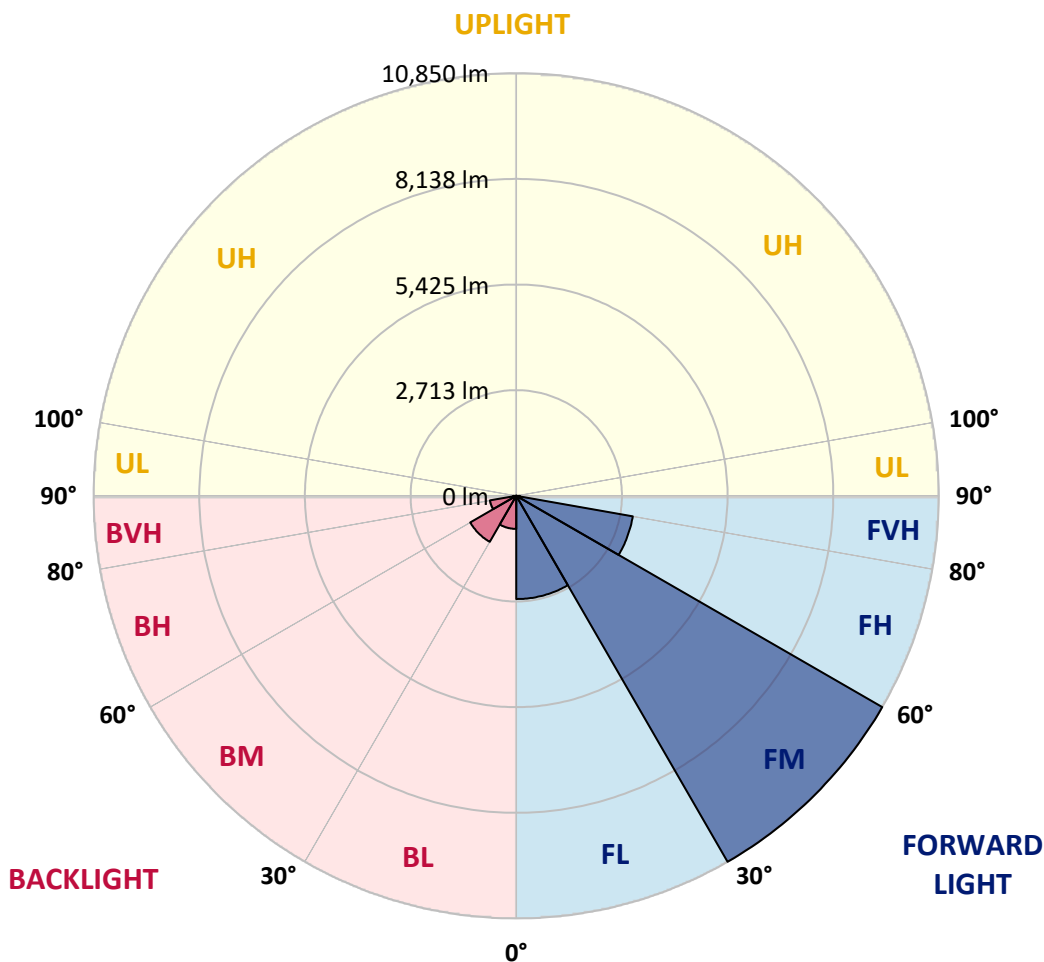


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2651.1	13.5			
FM (30°-60°)	10850.3	55.3			
FH (60°-80°)	3039.1	15.5			G2/5000
FVH (80°-90°)	89.2	0.5			G1/100
BL (0°-30°)	849.8	4.3	B2/1000		
BM (30°-60°)	1363.7	7.0	B2/2500		
BH (60°-80°)	686.2	3.5	B2/1000		G2/1000
BVH (80°-90°)	82.7	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	4120.3	4120.3	4120.3	4120.3	4120.3	4120.3	4120.3	4120.3	4120.3	4120.3	4120.3
2.5°	5119.8	5063.9	5019.9	4981.2	4930.8	4794.5	4658.1	4655.9	4547.5	4380.1	4208.3
5°	5953.9	5878.8	5888.4	5768.2	5647.9	5450.4	5161.6	5146.6	4915.8	4602.3	4283.5
7.5°	6497.1	6498.2	6468.1	6399.4	6269.5	6045.2	5717.7	5643.6	5322.7	4847.1	4369.3
10°	6469.2	6498.2	6548.6	6607.7	6647.4	6536.8	6238.4	6148.2	5730.6	5143.4	4464.9
12.5°	6097.8	6142.8	6214.7	6362.9	6602.4	6784.9	6682.8	6609.8	6203.0	5438.6	4570.1
15°	5865.9	5892.7	5932.4	6032.2	6289.9	6726.8	6991.0	6952.3	6648.5	5772.5	4688.2
17.5°	5795.0	5821.8	5834.8	5895.9	6079.5	6527.2	7112.3	7181.0	7043.5	6079.5	4807.3
20°	5865.9	5878.8	5878.8	5915.3	6059.2	6410.2	7106.9	7245.4	7367.7	6447.7	4919.0
22.5°	6051.6	6057.0	6049.5	6062.3	6169.7	6442.4	7056.4	7228.2	7629.7	6760.1	5006.0
25°	6353.3	6361.8	6312.5	6282.4	6360.8	6584.1	7084.3	7242.2	7834.8	7058.6	5063.9
27.5°	6695.7	6706.5	6646.3	6576.5	6613.0	6759.0	7193.8	7335.5	7988.2	7352.8	5100.4
30°	7115.4	7119.7	7018.9	6935.1	6911.5	7019.9	7380.6	7512.7	8179.4	7699.5	5155.2
32.5°	7544.9	7577.1	7447.2	7329.1	7289.4	7322.7	7656.5	7784.3	8407.0	8072.0	5243.2
35°	8128.9	8134.3	7978.7	7834.8	7703.8	7746.7	8009.8	8102.1	8721.5	8502.5	5367.8
37.5°	8857.8	8907.2	8692.5	8424.1	8263.1	8200.8	8437.0	8537.9	9162.8	9030.7	5555.6
40°	9667.3	9685.5	9502.0	9334.5	9040.3	8860.0	9023.2	9132.7	9707.0	9660.9	5773.5
42.5°	10176.2	10215.9	10229.8	10212.7	9991.5	9688.7	9751.1	9802.6	10351.2	10252.4	5996.8
45°	10347.9	10407.0	10606.7	11029.6	11053.3	10754.8	10609.9	10659.3	11053.3	10849.3	6210.4
47.5°	10063.5	10164.3	10532.6	11400.0	12049.5	12072.1	11635.2	11526.7	11693.1	11344.2	6365.1
50°	9328.0	9349.6	9913.1	11169.2	12516.5	13331.4	12879.4	12677.6	12300.7	11710.3	6471.3
52.5°	8190.1	8214.8	8687.2	10096.7	12228.8	14211.6	14335.1	13974.4	12918.0	11994.8	6541.1
55°	6079.5	6222.3	6741.9	8104.2	10865.4	14129.0	15492.4	15287.4	13664.1	12220.2	6650.6
57.5°	3738.1	3607.1	4223.3	5513.8	8171.8	12993.2	15849.9	15916.4	14485.4	12409.1	6834.2
60°	1719.8	1745.6	2000.0	2843.8	4981.2	10164.3	14928.8	15349.6	14939.5	12402.7	6880.4
62.5°	1185.2	1161.6	1097.2	1248.5	2271.6	6428.4	12609.9	13322.8	14029.1	12017.3	6696.8
65°	1059.6	1035.9	911.5	869.6	1043.5	2802.0	9167.1	10066.7	11812.3	11044.7	6239.5
67.5°	989.8	957.6	828.8	747.2	745.0	1115.4	5405.4	6488.6	8761.2	9337.7	5406.4
70°	916.8	891.0	763.3	673.1	634.5	701.1	2375.7	3110.1	5688.8	6729.0	4211.6
72.5°	843.8	813.8	698.9	602.2	551.8	525.0	910.4	1184.1	3214.2	4034.4	2581.9
75°	737.6	722.5	624.8	545.4	490.6	424.0	577.6	659.2	1537.3	1853.0	1295.8
77.5°	645.2	629.1	555.1	476.7	436.9	344.6	410.1	447.7	648.4	751.5	585.1
80°	472.4	488.5	468.1	420.8	389.7	270.5	275.9	307.0	385.4	426.2	357.5
82.5°	299.5	329.6	360.7	324.2	295.2	213.6	191.1	202.9	263.0	279.1	158.9
85°	125.6	127.7	209.3	197.6	168.5	126.7	114.9	121.3	140.6	147.1	74.1
87.5°	48.3	47.3	74.1	68.7	52.6	36.5	36.5	40.8	55.8	51.6	23.6
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°	4120.3	4120.3	4120.3	4120.3	4120.3	4120.3	4120.3	4120.3	4120.3	4120.3	4120.3
2.5°	4134.3	4058.0	3906.6	3718.7	3581.4	3426.7	3290.4	3192.8	3156.3	3139.0	3106.8
5°	4131.0	3980.7	3667.3	3338.8	3074.6	2804.1	2575.5	2427.3	2414.4	2315.6	2306.0
7.5°	4132.1	3902.3	3403.2	2920.0	2517.4	2240.5	2051.5	2002.2	1943.1	1928.1	1935.6
10°	4135.3	3802.5	3119.8	2505.7	2116.0	1934.6	1863.7	1844.4	1846.5	1853.0	1854.0
12.5°	4139.6	3705.9	2825.6	2191.1	1890.5	1815.4	1807.9	1825.1	1843.3	1857.3	1860.5
15°	4145.0	3595.3	2539.0	1937.7	1777.8	1771.3	1796.0	1825.1	1850.8	1871.2	1874.4
17.5°	4138.6	3466.5	2298.5	1782.1	1715.6	1746.7	1787.5	1824.0	1847.6	1866.9	1869.0
20°	4123.5	3322.6	2066.6	1672.6	1676.9	1727.3	1771.3	1805.7	1831.4	1841.1	1848.7
22.5°	4065.6	3150.9	1864.7	1587.8	1630.7	1700.5	1753.1	1773.5	1744.5	1724.1	1729.5
25°	3966.7	2927.6	1676.9	1519.1	1588.8	1662.9	1716.6	1667.2	1643.6	1635.0	1639.3
27.5°	3843.3	2682.8	1535.2	1447.1	1535.2	1621.0	1606.1	1597.5	1586.7	1572.8	1575.9
30°	3710.2	2443.4	1414.9	1391.4	1477.2	1526.6	1533.1	1547.0	1535.2	1513.7	1522.3
32.5°	3586.7	2218.0	1323.6	1344.1	1436.4	1428.9	1477.2	1493.3	1438.5	1366.6	1369.8
35°	3481.5	2008.6	1254.9	1297.9	1366.6	1369.8	1418.2	1362.3	1303.3	1268.9	1271.1
37.5°	3402.1	1845.4	1209.9	1258.2	1277.6	1318.4	1292.5	1263.6	1256.0	1232.4	1233.5
40°	3354.8	1702.7	1180.9	1227.1	1223.8	1251.7	1169.1	1198.1	1208.9	1201.3	1202.4
42.5°	3307.6	1601.8	1150.8	1184.1	1183.0	1128.3	1110.0	1134.8	1162.7	1165.9	1163.7
45°	3270.1	1523.4	1119.7	1118.6	1140.1	1054.2	1048.9	1063.9	1103.6	1122.9	1121.9
47.5°	3228.2	1457.9	1072.4	1042.4	1048.9	1008.0	999.4	1005.9	1054.2	1085.4	1094.0
50°	3175.5	1392.4	1013.4	972.6	945.8	965.1	967.2	968.3	1016.7	1052.1	1059.6
52.5°	3133.7	1343.0	945.8	915.8	883.6	926.4	942.6	944.7	973.7	1002.7	1008.0
55°	3158.4	1315.1	879.3	857.7	828.8	886.8	917.9	922.2	928.6	950.1	953.3
57.5°	3232.5	1321.5	825.5	797.7	776.2	839.5	892.1	895.3	891.0	916.8	921.1
60°	3255.0	1318.4	785.8	731.1	718.2	789.0	854.5	861.0	859.9	897.5	905.0
62.5°	3160.6	1277.6	746.1	675.2	666.7	737.6	802.0	827.7	833.1	886.8	896.4
65°	2938.3	1193.8	693.5	616.2	616.2	682.8	751.5	786.9	802.0	873.9	884.6
67.5°	2645.2	1095.0	639.8	565.7	563.6	630.2	697.8	734.3	757.9	855.6	862.0
70°	2195.4	961.9	573.3	511.0	511.0	571.1	632.3	676.3	710.7	821.2	821.2
72.5°	1504.0	799.8	492.7	448.8	449.9	505.6	567.9	617.3	658.1	752.5	754.7
75°	951.2	624.8	404.7	382.2	386.4	439.1	503.5	555.1	636.6	743.9	747.2
77.5°	505.6	439.1	322.1	316.7	322.1	370.4	442.3	513.2	638.7	645.2	634.5
80°	327.4	311.3	254.4	243.7	245.8	298.5	394.0	487.4	513.2	519.6	495.9
82.5°	178.2	197.6	180.4	169.6	169.6	233.0	336.0	387.5	368.2	306.0	292.0
85°	76.2	92.3	93.4	81.6	78.4	143.9	225.5	211.5	196.5	187.9	185.7
87.5°	21.4	30.0	30.0	22.5	17.2	39.7	45.1	12.9	0.0	1.1	2.2
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)