

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: P454096

Luminaire Tested: **GALN-SA5A-830-U-T2R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454096
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5A-830-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18547 lumens
Efficiency: N/A
Efficacy: 120.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 154
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



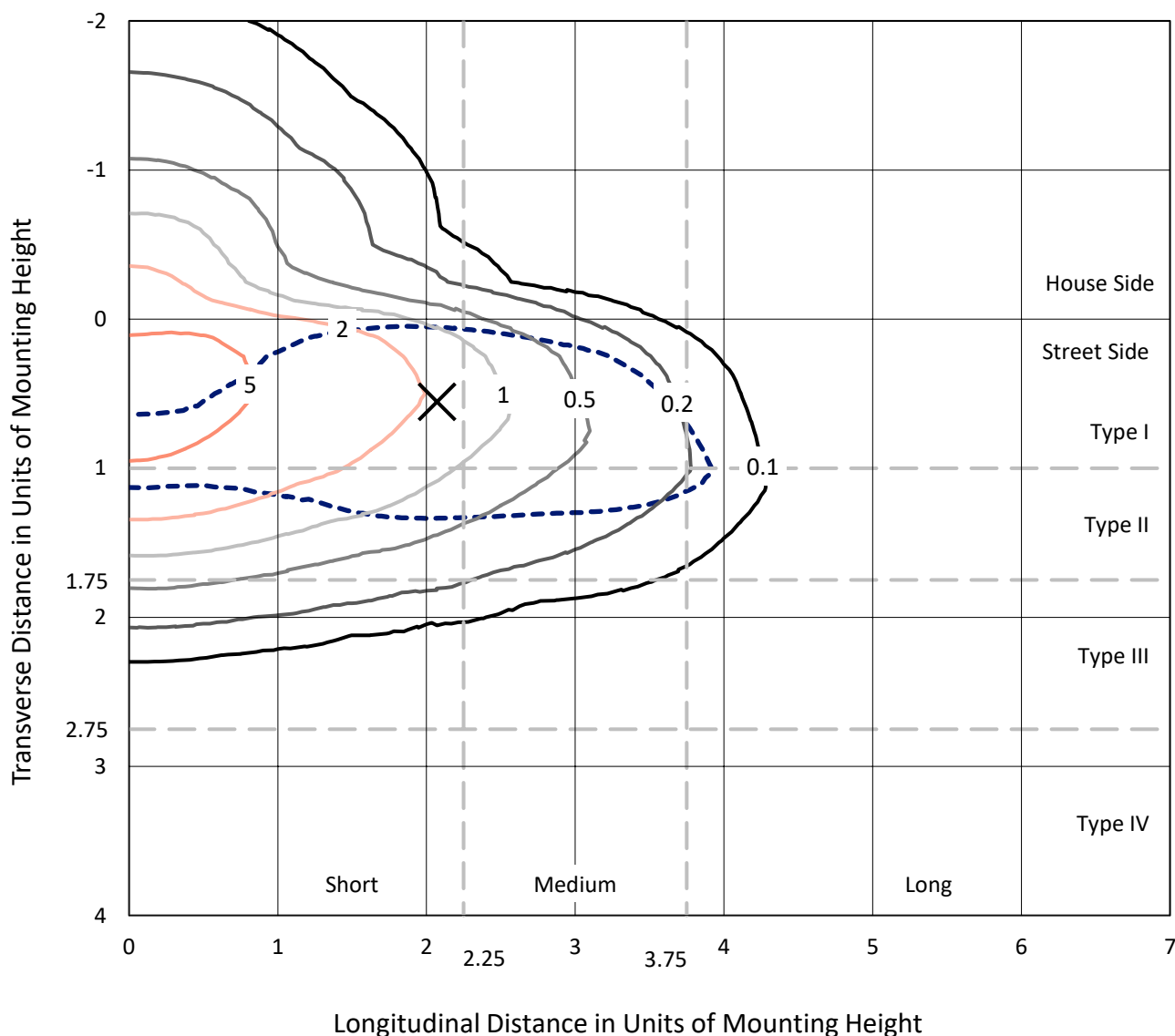
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd



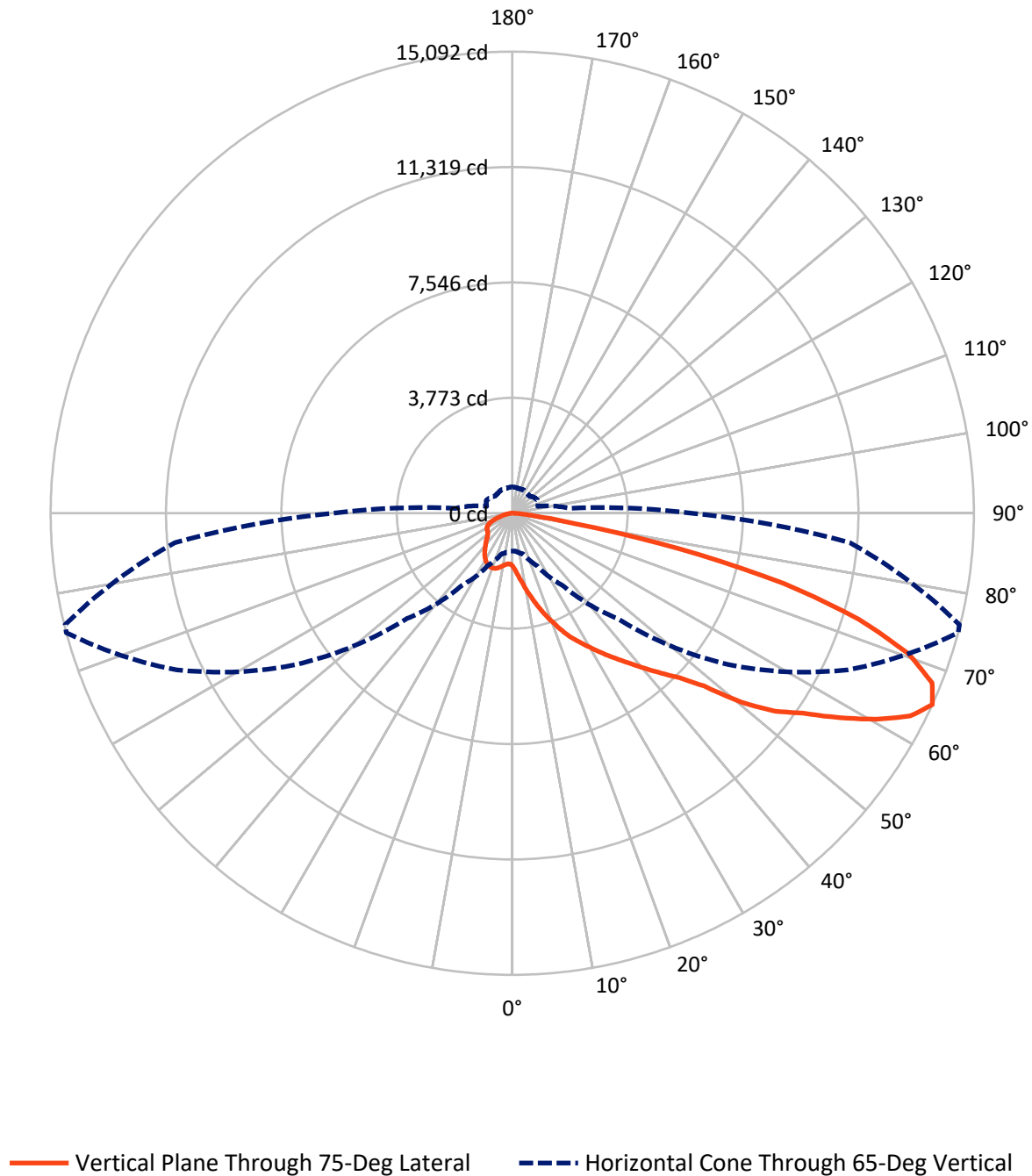
Based on 25 foot mounting height. Maximum calculated value = 7.2 fc

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	3118.0	0.0	3118.0
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	15429.0	0.0	15429.0
	% Fixture	83.2	0.0	83.2
Total	Lumens	18547.0	0.0	18547.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.4	1.1
10°-20°	820.1	4.4
20°-30°	1584.1	8.5
30°-40°	2573.1	13.9
40°-50°	3539.5	19.1
50°-60°	4178.9	22.5
60°-70°	3661.4	19.7
70°-80°	1748.0	9.4
80°-90°	232.6	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°	18547.0	100.0
0°-180°	18547.0	100.0

Coefficient of Utilization



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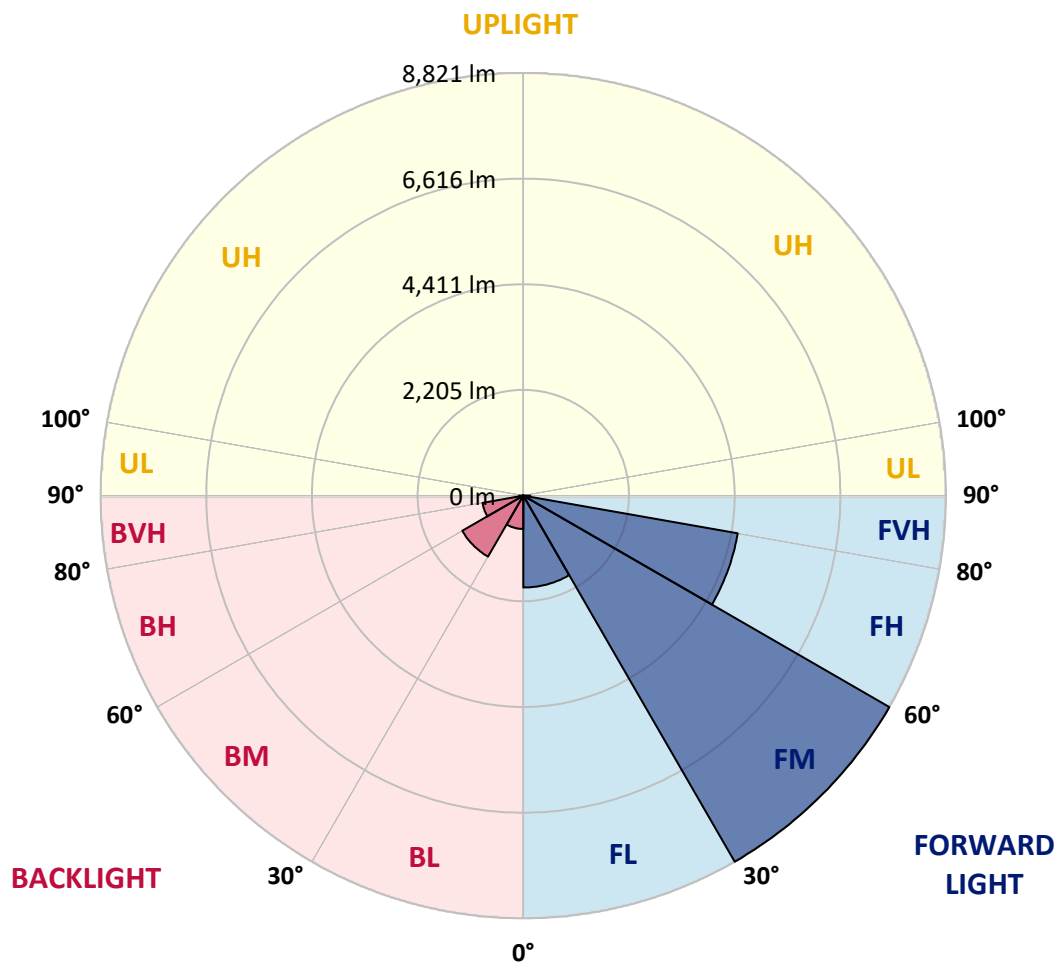
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1917.5	10.3			
FM	(30°-60°)	8821.3	47.6			
FH	(60°-80°)	4544.8	24.5			G2/5000
FVH	(80°-90°)	145.4	0.8			G2/225
BL	(0°-30°)	696.1	3.8	B2/1000		
BM	(30°-60°)	1470.1	7.9	B2/2500		
BH	(60°-80°)	864.6	4.7	B2/1000		G2/1000
BVH	(80°-90°)	87.2	0.5			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°	65°	75°	76°	85°
0°	1723.3	1723.3	1723.3	1723.3	1723.3	1723.3	1723.3	1723.3	1723.3	1723.3	1723.3
2.5°	2289.6	2274.5	2258.4	2214.2	2166.9	2113.6	2037.1	1963.7	1866.1	1863.1	1790.7
5°	2924.4	2914.3	2842.9	2801.7	2692.0	2546.1	2422.4	2230.3	2052.2	2031.1	1890.2
7.5°	3507.9	3468.6	3441.5	3367.0	3258.4	3071.3	2831.8	2572.3	2274.5	2246.4	2013.0
10°	3947.5	3943.5	3929.4	3865.0	3783.5	3597.4	3331.8	2959.6	2556.2	2500.9	2161.9
12.5°	4276.4	4279.5	4277.4	4276.4	4218.1	4060.2	3772.4	3380.1	2840.9	2801.7	2333.9
15°	4492.7	4522.9	4535.0	4585.3	4590.3	4484.7	4237.2	3786.5	3161.8	3103.5	2519.0
17.5°	4635.6	4650.7	4707.0	4792.5	4861.9	4842.8	4622.5	4162.8	3489.8	3392.2	2711.1
20°	4772.4	4798.5	4841.8	4958.5	5081.2	5137.6	4982.6	4548.1	3814.7	3752.3	2923.4
22.5°	5057.1	5094.3	5109.4	5168.7	5273.4	5373.0	5302.5	4917.2	4170.8	4086.3	3148.7
25°	5538.9	5578.2	5535.9	5521.8	5556.0	5605.3	5590.3	5265.3	4506.8	4386.1	3362.0
27.5°	6166.7	6171.7	6089.2	6010.8	5926.3	5901.1	5854.8	5574.2	4798.5	4697.9	3576.3
30°	6840.7	6816.5	6679.7	6537.9	6395.0	6254.2	6121.4	5871.9	5123.5	5007.8	3786.5
32.5°	7466.4	7453.3	7301.4	7081.1	6839.7	6706.9	6438.3	6172.7	5471.5	5359.9	4002.8
35°	7935.2	7954.3	7787.3	7546.9	7283.3	7165.6	6826.6	6488.6	5831.7	5710.0	4238.2
37.5°	8268.2	8258.1	8110.2	7902.0	7670.6	7568.0	7280.3	6833.6	6219.0	6102.3	4495.7
40°	8386.9	8380.9	8271.2	8119.3	7972.4	7936.2	7755.1	7205.9	6662.6	6525.8	4805.6
42.5°	8311.4	8324.5	8252.1	8210.8	8183.7	8209.8	8226.9	7693.8	7146.5	7020.8	5141.6
45°	8080.1	8073.0	8063.0	8130.4	8283.3	8455.3	8693.7	8154.5	7672.6	7572.0	5592.3
47.5°	7666.6	7716.9	7742.1	7928.2	8262.1	8669.6	9230.9	8772.2	8436.2	8348.7	6279.4
50°	7088.2	7128.4	7277.3	7608.3	8106.2	8750.0	9756.0	9782.2	9709.8	9545.8	7025.8
52.5°	6184.8	6247.2	6554.0	7160.6	7786.3	8716.9	10073.9	10648.3	10743.9	10621.2	7761.2
55°	5173.8	5261.3	5585.2	6381.0	7345.7	8535.8	10293.2	11150.3	11531.6	11417.9	8469.4
57.5°	4183.9	4276.4	4609.4	5380.0	6577.1	8135.4	10437.1	11709.7	12604.0	12456.1	9350.6
60°	3135.7	3232.2	3517.9	4311.6	5482.6	7352.7	10339.5	12194.5	13675.3	13612.0	10232.9
62.5°	2023.0	2129.7	2378.1	3035.1	4214.1	6283.4	9817.4	12462.1	14602.9	14526.4	10876.7
65°	1232.3	1244.4	1381.2	1884.2	2884.2	4864.9	8623.3	12107.0	15091.8	15068.6	11072.9
67.5°	796.7	815.9	878.2	1128.7	1729.3	3379.1	6895.0	10935.0	14806.1	14798.0	10667.5
70°	673.0	679.0	707.2	761.5	1005.0	2049.2	4841.8	9066.9	13720.6	13720.6	9692.7
72.5°	601.6	609.6	619.7	636.8	717.3	1160.9	2889.2	7058.0	11846.5	11924.9	8250.1
75°	546.2	544.2	550.3	553.3	611.6	758.5	1493.9	5220.1	9164.5	9007.6	5974.5
77.5°	467.8	470.8	467.8	480.9	540.2	577.4	758.5	3502.8	5554.0	5350.8	2998.8
80°	384.3	389.3	394.3	402.4	461.7	438.6	455.7	1596.5	2054.2	2011.0	926.5
82.5°	288.7	295.8	303.8	322.9	363.2	289.7	287.7	682.1	741.4	679.0	341.0
85°	116.7	137.8	208.2	227.4	228.4	158.9	177.1	284.7	302.8	295.8	133.8
87.5°	27.2	32.2	67.4	101.6	93.6	59.4	65.4	92.6	105.6	97.6	45.3
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°	1723.3	1723.3	1723.3	1723.3	1723.3	1723.3	1723.3	1723.3	1723.3	1723.3	1723.3
2.5°	1757.5	1722.2	1661.9	1615.6	1582.4	1553.2	1535.1	1524.1	1520.0	1519.0	1520.0
5°	1816.8	1754.4	1658.9	1598.5	1565.3	1546.2	1535.1	1534.1	1535.1	1536.1	1533.1
7.5°	1898.3	1808.8	1684.0	1627.7	1602.5	1588.4	1583.4	1581.4	1582.4	1581.4	1581.4
10°	2006.9	1884.2	1733.3	1675.0	1653.8	1637.7	1629.7	1624.7	1620.6	1616.6	1614.6
12.5°	2126.7	1967.7	1786.6	1730.3	1700.1	1675.0	1656.9	1643.8	1634.7	1625.7	1623.7
15°	2260.4	2056.2	1846.0	1767.5	1724.3	1687.0	1655.8	1634.7	1618.6	1605.6	1604.5
17.5°	2388.2	2139.7	1886.2	1784.6	1721.2	1668.9	1627.7	1598.5	1578.4	1561.3	1559.3
20°	2525.0	2219.2	1904.3	1773.5	1691.1	1627.7	1573.4	1538.1	1515.0	1495.9	1492.9
22.5°	2662.8	2286.6	1902.3	1738.3	1638.7	1564.3	1507.0	1469.7	1442.6	1423.5	1416.4
25°	2794.6	2340.9	1877.2	1682.0	1566.3	1488.9	1430.5	1396.3	1372.2	1349.0	1349.0
27.5°	2913.3	2373.1	1829.9	1613.6	1491.9	1410.4	1364.1	1332.9	1310.8	1295.7	1286.7
30°	3030.0	2388.2	1765.5	1527.1	1413.4	1344.0	1306.8	1288.7	1268.5	1251.4	1249.4
32.5°	3134.6	2385.2	1685.0	1442.6	1339.0	1289.7	1274.6	1260.5	1239.4	1215.2	1209.2
35°	3236.3	2365.1	1589.5	1350.0	1276.6	1257.5	1261.5	1241.4	1203.2	1173.0	1167.9
37.5°	3346.9	2328.9	1484.8	1274.6	1224.3	1242.4	1252.5	1208.2	1145.8	1098.5	1087.5
40°	3474.7	2287.6	1376.2	1199.1	1183.0	1228.3	1228.3	1146.8	1061.3	1032.1	1024.1
42.5°	3624.6	2253.4	1285.6	1135.8	1148.8	1194.1	1189.1	1065.3	1030.1	1015.0	1011.0
45°	3862.0	2241.3	1192.1	1080.4	1120.7	1153.9	1112.6	1037.2	1017.0	1005.0	1001.0
47.5°	4237.2	2255.4	1109.6	1039.2	1088.5	1113.6	1027.1	1018.1	1004.0	986.9	984.9
50°	4585.3	2242.3	1051.3	1016.0	1060.3	1065.3	991.9	994.9	986.9	967.8	963.7
52.5°	4870.0	2201.1	1014.0	1004.0	1036.2	980.8	958.7	969.8	966.8	942.6	938.6
55°	5182.8	2175.9	995.9	1004.0	1020.1	907.4	927.5	943.6	939.6	922.5	921.5
57.5°	5562.1	2181.0	982.8	1007.0	1004.0	870.2	896.3	915.4	914.4	909.4	909.4
60°	5950.4	2183.0	962.7	1006.0	984.9	841.0	864.1	891.3	893.3	896.3	896.3
62.5°	6079.2	2095.5	923.5	987.9	942.6	812.8	834.0	871.2	869.2	877.2	878.2
65°	5838.7	1853.0	865.1	946.6	888.3	792.7	810.8	845.0	834.0	855.1	859.1
67.5°	5314.6	1533.1	774.6	872.2	827.9	771.6	795.7	808.8	788.7	829.9	830.9
70°	4593.3	1197.1	659.9	766.6	759.5	749.5	783.7	763.5	735.4	785.7	775.6
72.5°	3840.8	914.4	527.1	626.7	668.0	716.3	762.5	705.2	666.0	681.1	662.9
75°	2885.2	676.0	423.5	490.9	556.3	669.0	743.4	634.8	574.4	560.3	556.3
77.5°	1470.7	441.6	316.9	367.2	417.5	604.6	717.3	552.3	475.8	453.7	443.6
80°	525.1	274.6	223.3	253.5	281.7	520.1	626.7	456.7	369.2	365.2	369.2
82.5°	243.4	177.1	149.9	166.0	167.0	347.1	477.8	341.0	280.7	426.5	360.1
85°	104.6	88.5	84.5	82.5	76.5	154.9	268.6	183.1	285.7	127.8	117.7
87.5°	31.2	35.2	31.2	23.1	17.1	17.1	27.2	10.1	7.0	5.0	5.0
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)