

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: P647456

Luminaire Tested: **GALN-SA5D-835-U-T2R-GRSBK**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P647456
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-9)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA5D-835-U-T2R-GRSBK
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH BLACK GLARE REDUCTION SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20062 lumens
Efficiency: N/A
Efficacy: 64.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B2 - U0 - G1

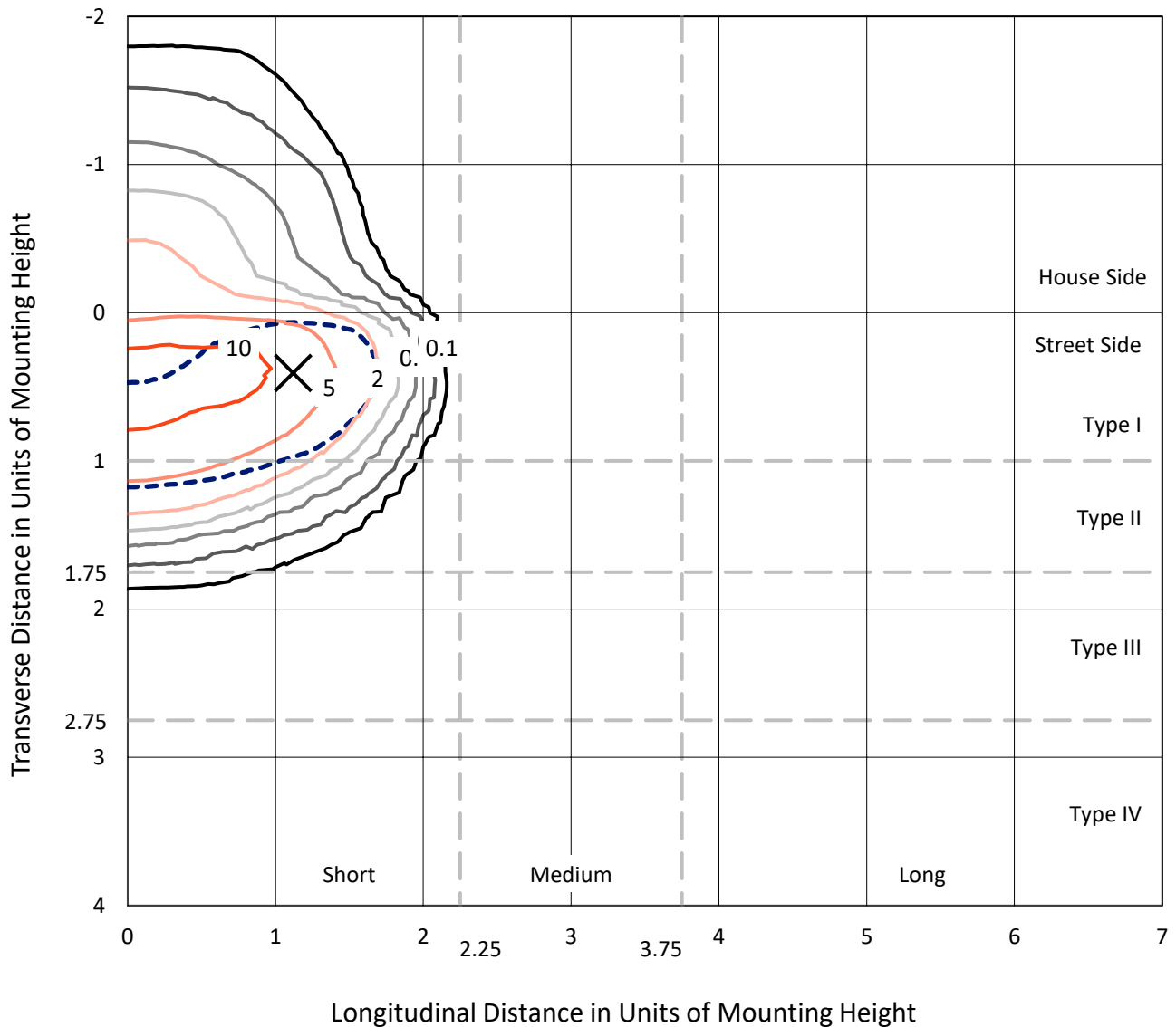
Input Watts (W): 309
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

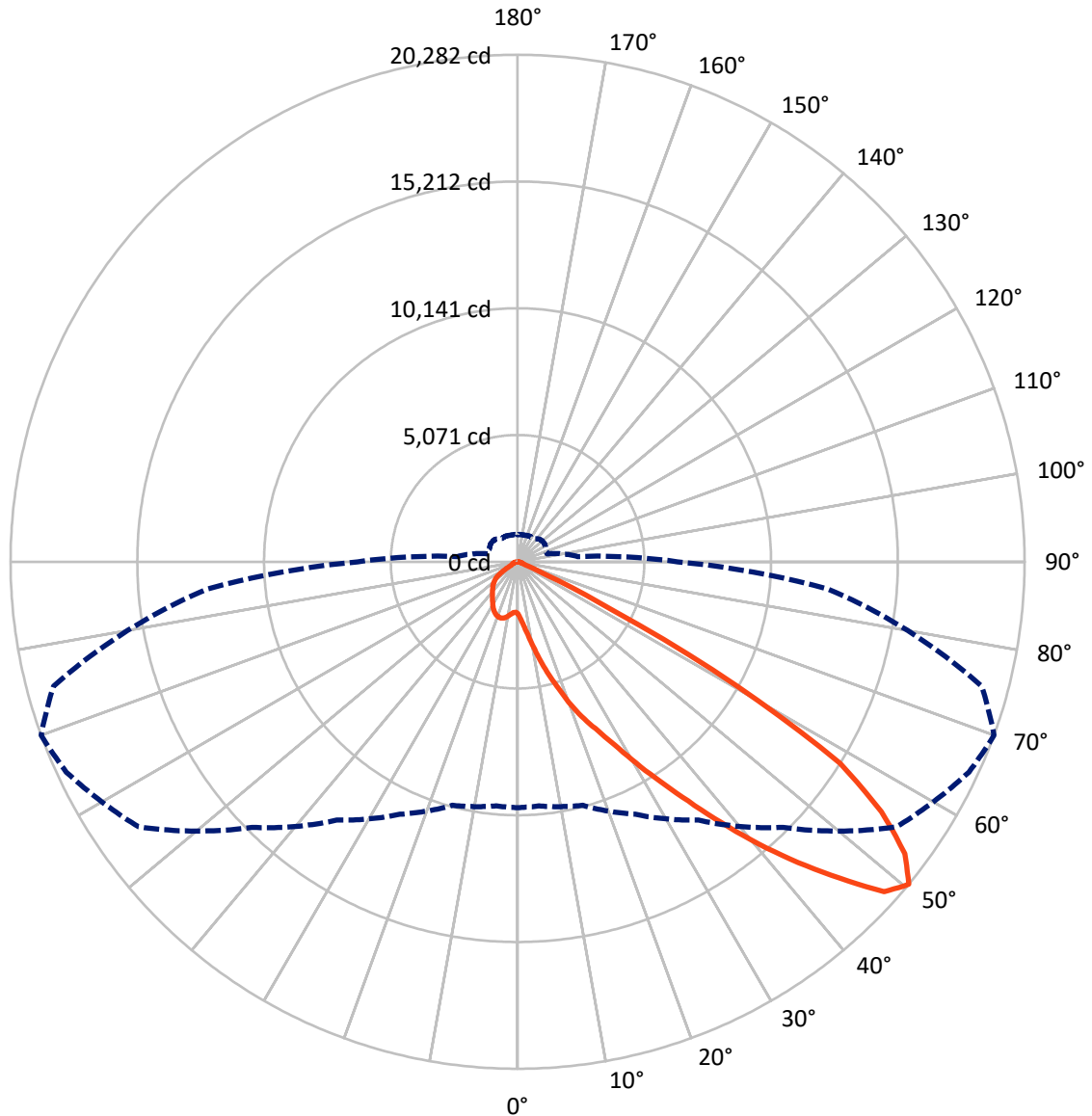
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.9 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral - - - Horizontal Cone Through 50-Deg Vertical

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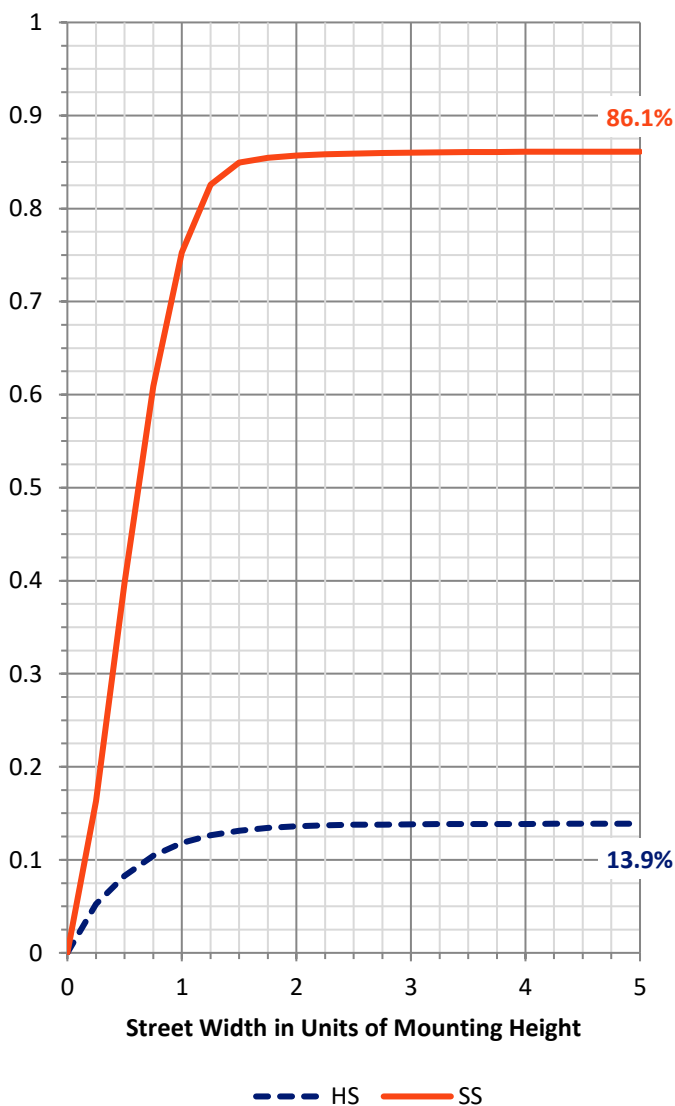
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2801.8	0.0	2801.8
	% Fixture	14.0	0.0	14.0
Street Side	Lumens	17260.2	0.0	17260.2
	% Fixture	86.0	0.0	86.0
Total	Lumens	20062.0	0.0	20062.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	270.2	1.3
10°-20°	1168.9	5.8
20°-30°	2452.1	12.2
30°-40°	4226.6	21.1
40°-50°	6177.1	30.8
50°-60°	4811.0	24.0
60°-70°	815.1	4.1
70°-80°	112.0	0.6
80°-90°	29.0	0.1
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°	20062.0	100.0
0°-180°	20062.0	100.0

Coefficient of Utilization



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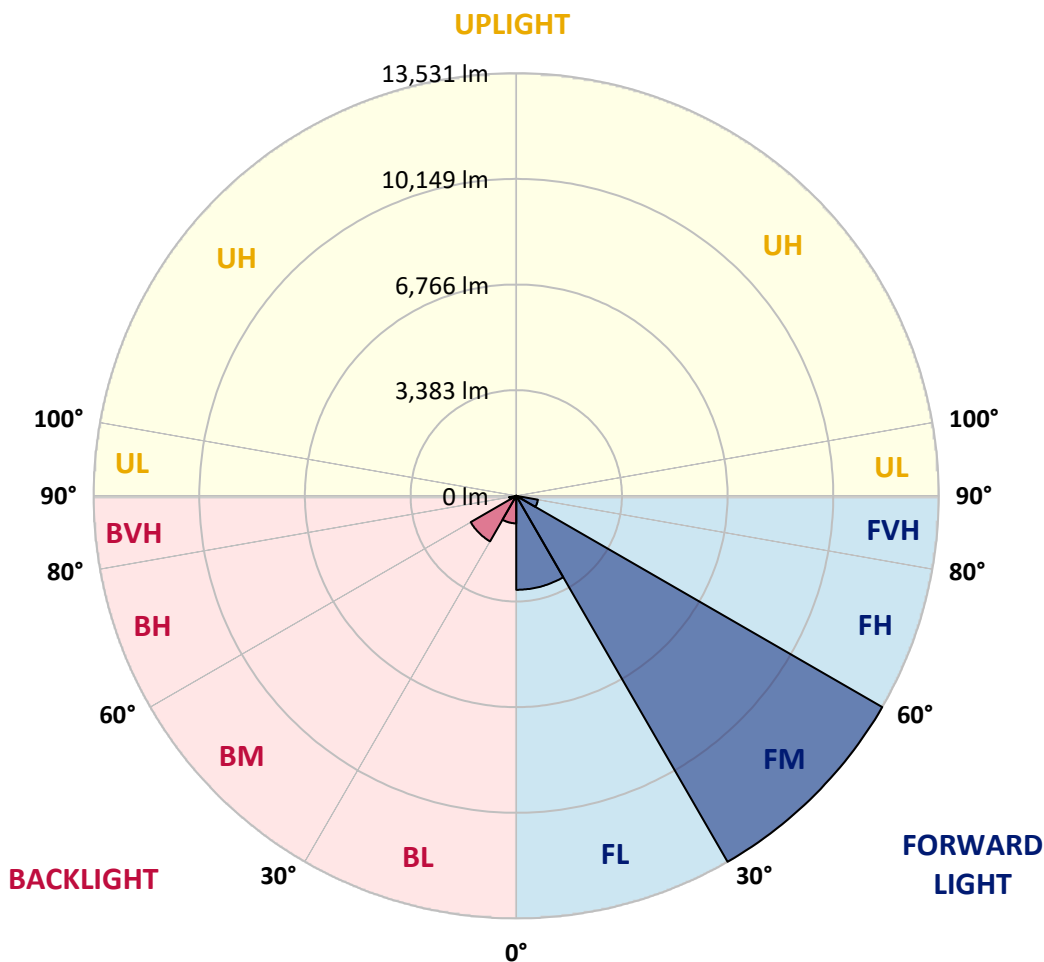
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3009.5	15.0			
FM (30°-60°)	13531.5	67.4			
FH (60°-80°)	705.8	3.5			G1/1800
FVH (80°-90°)	13.4	0.1			G1/100
BL (0°-30°)	881.7	4.4	B2/1000		
BM (30°-60°)	1683.2	8.4	B2/2500		
BH (60°-80°)	221.3	1.1	B1/500		G1/500
BVH (80°-90°)	15.6	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	2078.0	2078.0	2078.0	2078.0	2078.0	2078.0	2078.0	2078.0	2078.0	2078.0	2078.0
2.5°	2721.2	2701.4	2658.6	2579.4	2546.4	2467.2	2421.0	2332.0	2275.9	2213.3	2144.0
5°	3832.8	3730.5	3667.9	3578.9	3318.3	3156.7	2889.4	2661.9	2556.3	2440.8	2282.5
7.5°	4980.7	4914.7	4828.9	4637.6	4459.5	4123.0	3664.6	3163.2	2948.9	2750.9	2437.6
10°	5930.6	5745.9	5736.0	5594.2	5399.6	4997.2	4446.3	3822.9	3440.3	3150.0	2658.6
12.5°	6593.6	6425.4	6501.2	6484.8	6303.4	5934.0	5297.3	4472.7	4073.6	3621.7	2886.1
15°	7197.3	7128.0	7104.9	7085.1	7012.5	6738.7	6168.2	5264.3	4687.1	4142.9	3143.4
17.5°	7787.6	7609.6	7695.3	7711.8	7705.2	7457.8	6923.4	6016.4	5336.9	4693.7	3413.9
20°	8312.1	8328.6	8213.2	8190.1	8170.3	8160.4	7639.3	6761.8	6135.1	5270.9	3766.9
22.5°	8985.0	8869.6	8971.8	8905.8	8777.2	8698.0	8298.9	7421.5	6827.8	5966.9	4126.4
25°	9779.9	9872.3	9631.5	9605.1	9463.3	9189.5	8830.0	8160.4	7494.1	6613.5	4515.6
27.5°	10759.6	10598.0	10535.3	10390.2	10132.9	10017.5	9595.2	8922.4	8298.9	7292.9	4891.6
30°	11600.7	11557.8	11244.4	11073.0	10848.6	10845.3	10255.0	9954.7	9347.8	8358.3	5409.5
32.5°	12286.8	12098.8	11983.3	11864.6	11683.1	11732.6	11234.6	11076.2	10466.0	9347.8	6019.7
35°	12745.3	12610.0	12540.8	12359.3	12306.6	12527.5	12319.7	12253.8	11752.4	10739.8	6735.4
37.5°	12890.4	12933.3	12920.0	12692.5	12804.6	13401.7	13668.8	13497.3	13233.4	12207.6	7510.6
40°	13019.0	13048.7	12982.8	13249.9	13569.9	14249.3	15215.8	14932.1	14833.2	13695.2	8589.2
42.5°	13091.6	13068.5	13068.5	13530.3	14015.2	15380.7	16710.0	16522.0	16446.1	15278.4	9836.0
45°	12778.2	12553.9	12794.8	13421.4	14397.8	15938.2	17904.1	18164.7	18055.7	17161.9	11293.9
47.5°	11607.3	11745.8	11881.1	12718.9	13932.7	15766.6	18636.3	19523.6	19724.8	18745.2	12250.5
50°	9836.0	9806.3	10086.7	11142.2	12616.6	15027.8	18494.5	19916.1	20282.2	19220.1	12451.7
52.5°	7154.3	7372.0	7675.5	8724.4	10472.6	13114.7	16663.8	18903.5	19391.6	18636.3	12319.7
55°	4166.0	3925.2	4608.0	5495.3	7144.5	9892.1	14087.7	16756.2	17659.9	17574.2	11653.5
57.5°	1669.0	1616.3	1850.5	2493.6	3727.2	6131.8	10245.0	13767.8	15215.8	16096.5	10241.7
60°	732.3	715.7	841.1	1015.9	1523.9	2826.8	5604.1	8562.8	10073.5	11247.7	7048.8
62.5°	527.7	521.2	583.8	646.5	804.8	1230.3	2355.1	3450.2	4301.2	5195.0	3156.7
65°	425.5	442.0	484.9	517.9	593.7	682.8	831.2	959.9	1177.6	1220.5	696.0
67.5°	346.3	359.6	399.1	435.4	448.6	369.4	382.7	336.5	336.5	300.1	240.8
70°	254.0	257.3	303.5	346.3	277.1	148.5	260.6	260.6	234.2	224.3	204.5
72.5°	188.0	191.3	227.6	214.4	108.8	92.4	191.3	211.1	191.3	181.4	164.9
75°	138.5	141.8	118.8	49.5	46.2	59.4	112.1	145.2	138.5	135.2	125.4
77.5°	26.4	19.8	16.5	23.1	33.0	49.5	72.6	89.0	92.4	99.0	92.4
80°	3.3	3.3	9.9	19.8	36.3	52.8	75.9	85.7	89.0	92.4	85.7
82.5°	0.0	3.3	9.9	19.8	36.3	49.5	66.0	75.9	82.4	85.7	82.4
85°	0.0	3.3	6.6	16.5	29.7	36.3	33.0	23.1	19.8	23.1	16.5
87.5°	0.0	0.0	3.3	3.3	6.6	6.6	6.6	6.6	6.6	6.6	6.6
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°	2078.0	2078.0	2078.0	2078.0	2078.0	2078.0	2078.0	2078.0	2078.0	2078.0	2078.0
2.5°	2104.4	2091.2	2045.0	1995.6	1952.7	1972.5	1952.7	1936.2	1942.8	1936.2	1929.6
5°	2219.9	2160.5	2061.6	2018.7	1982.4	1979.1	1969.2	1965.9	1969.2	1969.2	1939.5
7.5°	2328.7	2233.0	2127.5	2081.3	2038.5	2041.8	2018.7	2018.7	2015.4	1998.8	1992.3
10°	2493.6	2365.0	2229.7	2147.3	2094.5	2084.7	2061.6	2038.5	2038.5	2038.5	2005.5
12.5°	2675.0	2513.4	2328.7	2233.0	2170.4	2120.9	2084.7	2078.0	2041.8	2035.2	2018.7
15°	2833.4	2628.8	2394.6	2262.7	2183.6	2117.6	2061.6	2025.2	2008.8	1998.8	1985.7
17.5°	2988.4	2727.8	2431.0	2262.7	2177.0	2101.1	2041.8	2008.8	1969.2	1975.7	1949.4
20°	3196.2	2833.4	2440.8	2219.9	2114.3	2041.8	1962.6	1946.1	1923.0	1903.2	1909.8
22.5°	3397.4	2909.2	2411.2	2167.1	2015.4	1929.6	1890.0	1870.2	1860.3	1843.8	1820.8
25°	3578.9	2991.7	2365.0	2071.4	1909.8	1847.2	1810.8	1807.6	1784.5	1784.5	1741.6
27.5°	3763.6	3021.4	2285.8	1959.3	1817.4	1781.2	1764.6	1758.1	1748.2	1725.1	1695.4
30°	3974.7	3031.3	2170.4	1843.8	1735.0	1695.4	1718.5	1735.0	1692.1	1649.2	1662.4
32.5°	4149.4	3008.2	2031.9	1735.0	1675.6	1655.8	1702.0	1718.5	1669.0	1622.8	1599.7
35°	4360.6	2952.1	1896.6	1649.2	1616.3	1655.8	1695.4	1695.4	1596.5	1540.4	1527.2
37.5°	4680.5	2889.4	1771.3	1576.6	1553.6	1636.0	1688.8	1652.5	1497.5	1428.3	1411.7
40°	5023.6	2849.9	1649.2	1504.1	1520.6	1603.0	1632.7	1520.6	1362.3	1319.4	1306.2
42.5°	5521.6	2770.7	1540.4	1441.4	1490.9	1556.8	1556.8	1355.7	1296.3	1273.2	1269.9
45°	6141.8	2714.7	1444.7	1388.7	1448.0	1464.5	1411.7	1269.9	1227.0	1220.5	1223.8
47.5°	6445.2	2605.7	1345.7	1326.0	1368.8	1372.1	1233.6	1200.7	1164.3	1154.5	1147.9
50°	6399.0	2411.2	1217.1	1243.5	1302.9	1269.9	1124.8	1131.4	1098.4	1095.1	1078.6
52.5°	6075.8	2104.4	1088.5	1151.2	1217.1	1121.5	1035.8	1029.1	1029.1	986.3	969.7
55°	5386.4	1695.4	933.5	1012.7	1091.8	943.4	920.3	913.7	897.2	857.6	847.7
57.5°	4264.9	1243.5	702.6	788.3	926.8	801.6	798.2	768.5	725.7	696.0	696.0
60°	2536.5	715.7	442.0	481.5	613.5	649.8	722.4	709.2	636.6	590.5	577.2
62.5°	1157.7	369.4	280.4	287.0	329.9	422.2	567.4	656.4	554.1	475.0	468.4
65°	389.2	273.7	230.9	221.0	227.6	254.0	339.7	465.1	442.0	366.1	352.9
67.5°	237.5	244.1	217.7	201.2	201.2	197.9	194.6	211.1	260.6	254.0	257.3
70°	204.5	224.3	201.2	181.4	174.8	164.9	138.5	115.4	99.0	115.4	122.1
72.5°	164.9	178.1	171.6	155.0	138.5	125.4	99.0	75.9	56.1	49.5	49.5
75°	122.1	131.9	138.5	118.8	105.5	89.0	72.6	49.5	29.7	19.8	19.8
77.5°	89.0	99.0	102.3	92.4	79.2	62.6	46.2	33.0	16.5	6.6	6.6
80°	75.9	89.0	99.0	92.4	82.4	59.4	42.9	23.1	13.2	3.3	3.3
82.5°	72.6	89.0	99.0	89.0	79.2	56.1	42.9	26.4	9.9	3.3	3.3
85°	16.5	23.1	29.7	36.3	42.9	42.9	33.0	19.8	9.9	3.3	3.3
87.5°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	3.3	3.3	0.0
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)