

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: P451287

Luminaire Tested: **GALN-SA2A-827-U-T3R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451287
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA2A-827-U-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6918 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G2

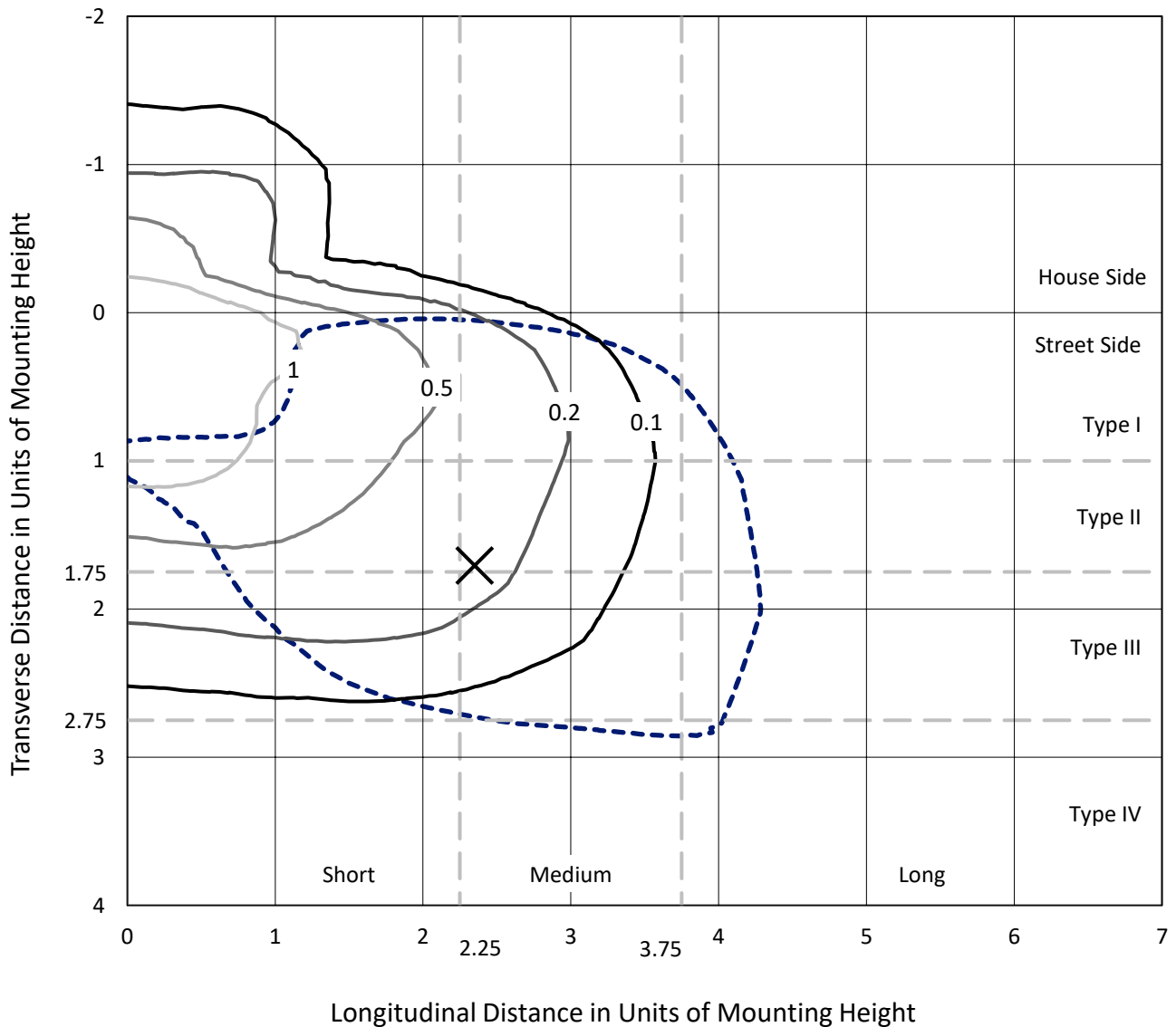
Input Watts (W): 63
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

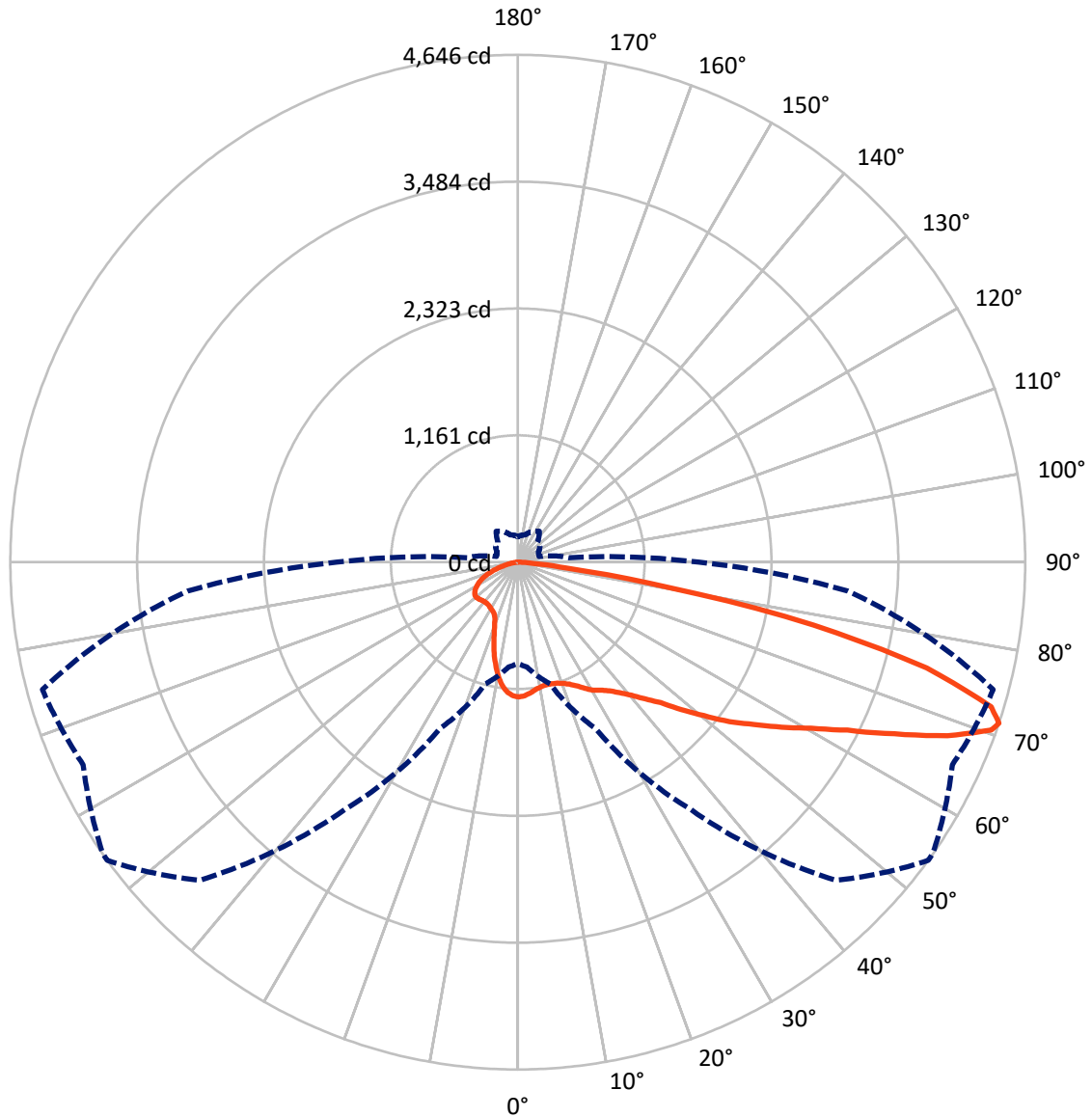
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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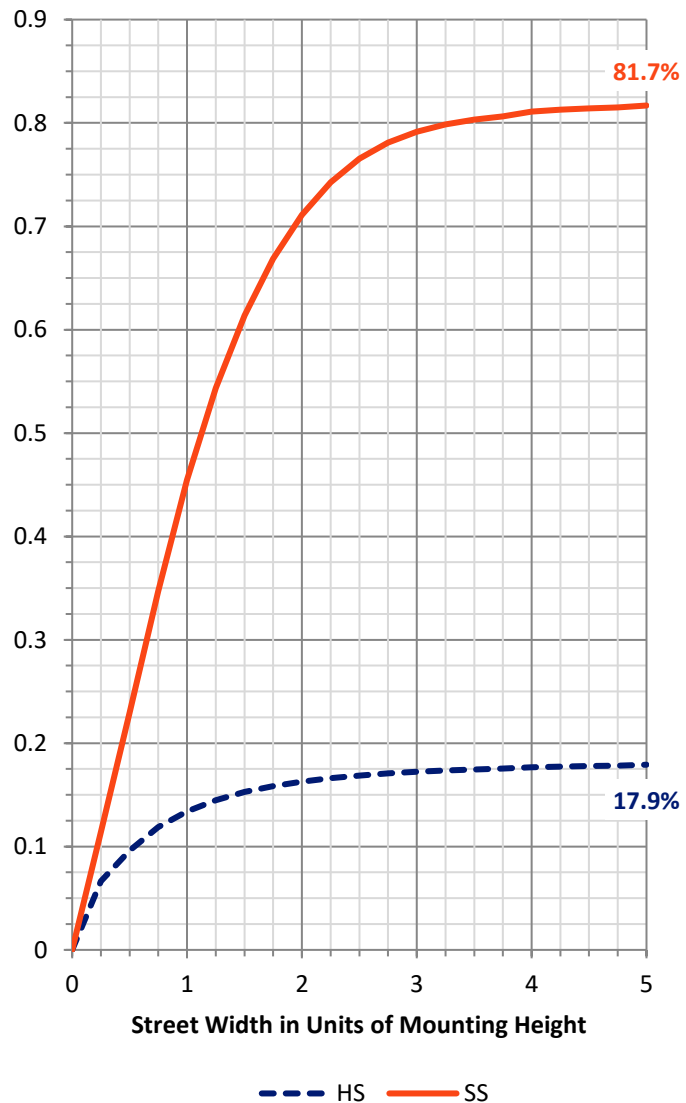
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1249.0	0.0	1249.0
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	5669.0	0.0	5669.0
	% Fixture	81.9	0.0	81.9
Total	Lumens	6918.0	0.0	6918.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.0	1.6
10°-20°	290.4	4.2
20°-30°	483.6	7.0
30°-40°	715.1	10.3
40°-50°	1007.2	14.6
50°-60°	1348.7	19.5
60°-70°	1699.9	24.6
70°-80°	1161.0	16.8
80°-90°	102.1	1.5
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°	6918.0	100.0
0°-180°	6918.0	100.0



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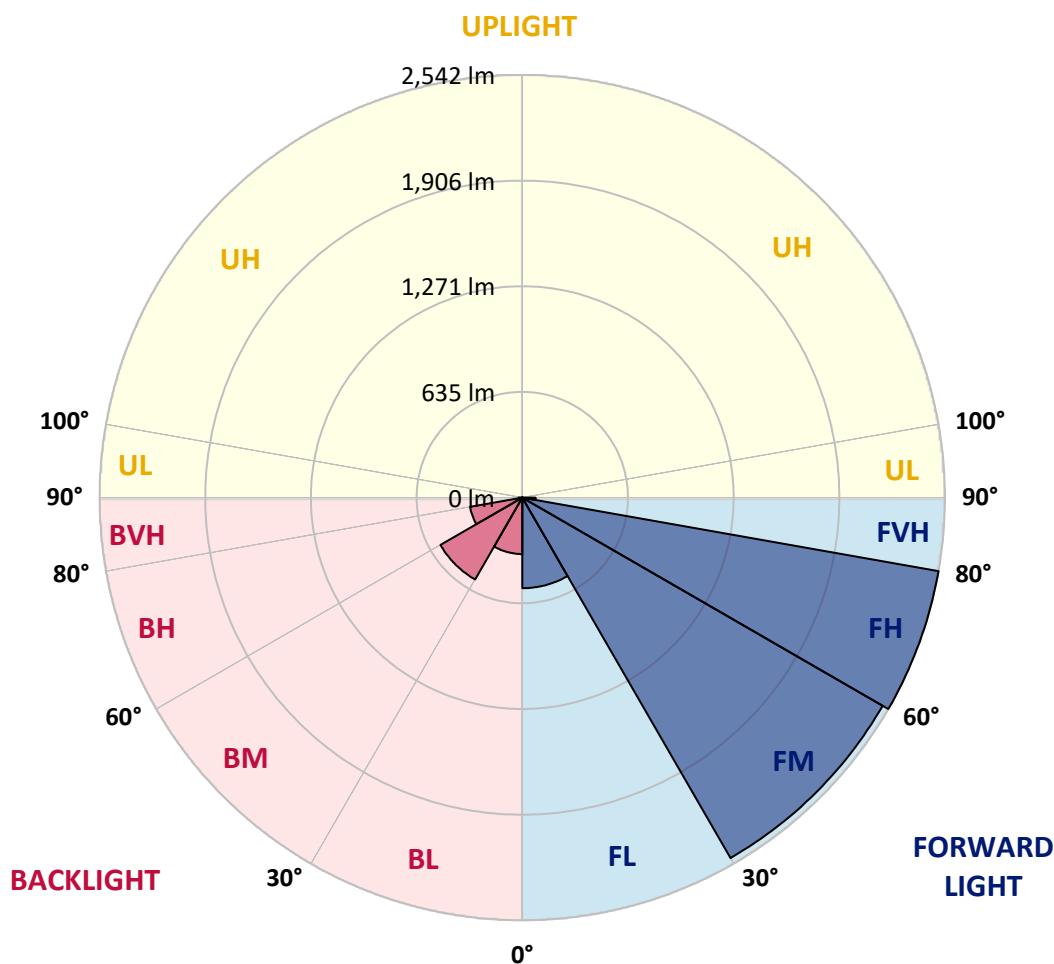
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	544.6	7.9			
FM	(30°-60°)	2502.7	36.2			
FH	(60°-80°)	2541.9	36.7			G2/5000
FVH	(80°-90°)	79.8	1.2			G1/100
BL	(0°-30°)	339.5	4.9	B1/500		
BM	(30°-60°)	568.3	8.2	B1/1000		
BH	(60°-80°)	319.0	4.6	B1/500		G1/500
BVH	(80°-90°)	22.3	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	1234.3	1234.3	1234.3	1234.3	1234.3	1234.3	1234.3	1234.3	1234.3	1234.3	1234.3
2.5°	1192.4	1198.0	1199.5	1203.3	1211.1	1217.5	1223.8	1223.1	1232.0	1235.8	1239.1
5°	1139.4	1140.9	1146.5	1153.9	1167.8	1185.3	1202.5	1202.9	1224.9	1242.5	1251.1
7.5°	1100.5	1105.4	1109.1	1116.9	1131.5	1150.6	1177.8	1180.1	1219.3	1254.1	1272.4
10°	1075.1	1080.7	1084.8	1094.5	1109.1	1130.4	1159.9	1164.0	1215.2	1272.4	1304.5
12.5°	1051.9	1057.5	1061.3	1074.0	1093.0	1119.2	1152.4	1157.3	1216.7	1293.7	1339.7
15°	1066.1	1070.6	1069.1	1072.8	1085.5	1115.4	1155.4	1160.3	1222.3	1314.2	1374.4
17.5°	1129.3	1133.0	1120.7	1106.5	1100.5	1122.5	1164.8	1170.0	1233.5	1335.5	1409.9
20°	1222.3	1232.4	1205.5	1173.7	1145.0	1148.0	1184.2	1189.8	1249.2	1356.8	1446.2
22.5°	1343.4	1350.9	1318.0	1265.7	1212.6	1185.3	1213.3	1216.7	1272.8	1384.5	1485.8
25°	1485.8	1490.2	1444.7	1377.4	1300.8	1249.2	1253.3	1259.3	1311.6	1415.9	1520.9
27.5°	1624.0	1638.2	1585.5	1503.3	1402.4	1316.5	1308.3	1312.0	1353.9	1433.4	1545.2
30°	1788.1	1787.0	1731.3	1636.0	1506.7	1389.7	1360.2	1359.5	1376.6	1442.0	1562.7
32.5°	1918.9	1934.2	1879.6	1775.7	1625.9	1465.6	1396.1	1394.6	1394.2	1457.0	1588.9
35°	2067.6	2069.8	2019.8	1915.1	1754.8	1560.9	1446.2	1438.7	1430.1	1489.1	1624.4
37.5°	2200.6	2211.1	2165.1	2047.8	1881.5	1659.9	1514.9	1510.1	1483.9	1544.8	1681.2
40°	2304.5	2312.3	2284.7	2173.0	2006.3	1766.8	1602.4	1593.4	1561.6	1636.0	1757.1
42.5°	2338.5	2354.6	2365.4	2310.5	2149.8	1893.4	1710.0	1698.8	1674.5	1774.2	1844.5
45°	2341.1	2366.5	2423.7	2426.3	2294.0	2045.2	1835.5	1827.7	1825.8	1951.4	1967.4
47.5°	2321.3	2347.1	2443.1	2495.1	2422.6	2198.4	2016.8	2004.4	2005.6	2170.3	2105.3
50°	2273.5	2304.1	2420.7	2539.2	2523.1	2357.6	2208.1	2204.0	2227.1	2420.3	2248.4
52.5°	2183.4	2220.4	2397.5	2566.8	2597.8	2494.7	2425.6	2414.0	2472.7	2691.6	2405.0
55°	1934.2	1989.9	2312.7	2582.1	2668.8	2625.9	2621.4	2642.3	2720.0	2987.6	2577.3
57.5°	1804.1	1846.0	2128.5	2584.8	2758.5	2778.3	2850.1	2855.3	2991.3	3301.9	2772.0
60°	1733.1	1770.1	2027.6	2567.6	2883.7	2967.0	3084.0	3102.7	3256.3	3642.3	2973.8
62.5°	1671.1	1702.9	1967.1	2508.2	3025.0	3246.9	3387.1	3396.0	3557.1	4018.2	3172.9
65°	1525.0	1561.2	1845.2	2448.7	3146.8	3596.7	3789.1	3778.7	3877.3	4342.6	3297.7
67.5°	1328.1	1374.0	1617.7	2243.6	3206.9	3979.0	4242.0	4229.0	4193.5	4555.2	3333.6
70°	1076.6	1101.2	1326.6	1889.0	2966.7	4179.6	4599.7	4585.8	4389.3	4583.2	3164.0
71°	926.4	964.8	1155.1	1677.8	2766.7	4118.4	4645.6	4641.9	4389.6	4505.9	3036.2
72.5°	723.1	746.6	914.8	1300.0	2351.6	3770.1	4532.0	4546.2	4294.4	4291.0	2772.7
75°	457.4	467.9	574.0	765.3	1290.3	2670.0	3868.7	3907.2	3813.1	3512.2	2062.0
77.5°	265.7	279.1	343.8	451.0	557.5	1449.1	2768.2	2810.1	2649.4	1933.8	844.1
80°	154.7	169.7	226.5	262.0	256.0	537.7	1409.5	1480.9	1147.2	488.4	236.9
82.5°	85.9	96.0	159.2	159.6	136.4	175.6	443.6	464.1	327.3	196.9	96.8
85°	62.4	70.6	102.8	93.0	65.4	75.5	154.3	161.8	132.3	83.0	31.4
87.5°	22.0	31.4	56.4	44.8	17.9	15.7	44.5	36.2	33.6	23.2	7.1
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°	1234.3	1234.3	1234.3	1234.3	1234.3	1234.3	1234.3	1234.3	1234.3	1234.3	1234.3
2.5°	1241.0	1241.7	1238.0	1231.3	1224.6	1216.0	1206.2	1198.8	1195.4	1195.0	1194.7
5°	1254.5	1256.3	1242.1	1221.2	1198.0	1169.6	1145.3	1117.7	1110.6	1099.4	1102.7
7.5°	1276.1	1275.0	1247.0	1202.5	1148.3	1088.2	1037.3	1007.8	977.2	968.6	969.0
10°	1307.1	1300.0	1247.0	1164.4	1074.0	984.7	913.7	868.8	844.5	824.3	816.9
12.5°	1340.0	1322.1	1235.0	1111.0	978.3	868.8	792.6	732.0	716.3	699.9	700.3
15°	1371.4	1341.5	1211.5	1035.8	875.2	745.1	671.1	634.9	630.0	631.9	631.5
17.5°	1399.8	1355.3	1175.6	952.1	754.8	639.0	599.8	602.4	615.5	624.8	625.9
20°	1428.6	1363.6	1122.2	840.0	641.2	574.7	576.2	596.8	616.6	629.3	631.1
22.5°	1455.9	1367.3	1059.4	731.7	559.0	547.4	569.5	591.5	611.0	623.3	625.2
25°	1473.8	1358.7	970.5	618.4	518.7	537.7	560.9	579.6	596.0	608.7	611.7
27.5°	1478.7	1331.1	860.2	526.9	500.0	528.4	549.7	563.5	576.2	588.2	590.4
30°	1476.0	1290.3	739.1	473.1	489.2	517.6	534.0	544.1	559.4	568.7	570.6
32.5°	1471.9	1242.9	612.8	444.3	480.2	507.5	517.2	526.1	525.8	522.0	524.7
35°	1473.4	1186.1	510.5	427.1	472.3	500.0	508.2	497.0	464.9	463.4	461.9
37.5°	1481.3	1130.0	436.1	415.2	468.2	498.9	503.4	451.8	423.4	410.3	406.9
40°	1501.5	1064.6	387.1	406.2	467.9	507.5	481.3	429.0	374.4	349.0	347.2
42.5°	1528.4	1000.3	357.2	400.6	472.3	520.5	472.3	396.9	337.4	322.5	320.2
45°	1568.3	926.7	340.8	398.0	479.1	525.4	469.3	373.3	322.5	310.5	310.5
47.5°	1613.6	856.5	331.8	396.1	487.7	522.0	442.8	365.8	315.4	316.9	324.0
50°	1658.4	795.6	325.1	392.0	495.1	520.2	432.0	365.5	317.3	336.3	349.0
52.5°	1710.3	752.6	316.9	385.3	495.1	508.2	428.6	372.9	322.5	328.1	333.7
55°	1773.1	739.1	306.4	370.7	486.2	478.3	426.7	383.8	326.2	313.1	315.4
57.5°	1856.1	760.8	296.3	352.4	465.6	447.3	426.0	386.8	317.6	306.8	304.6
60°	1952.5	803.8	293.3	333.7	437.6	420.8	421.5	378.2	305.7	294.5	296.3
62.5°	2020.1	829.6	291.5	319.5	406.9	391.6	410.7	367.7	300.4	290.7	292.6
65°	2020.1	798.2	274.3	297.8	367.3	356.5	397.6	354.6	293.7	282.5	280.6
67.5°	1943.5	706.6	248.1	265.3	323.6	316.5	379.3	338.9	283.6	275.0	270.5
70°	1744.0	535.9	215.2	227.2	268.3	274.7	355.7	317.6	266.8	256.3	249.6
71°	1656.2	466.7	201.4	207.8	247.0	256.3	344.5	308.7	259.3	244.4	232.4
72.5°	1486.9	393.1	180.5	183.1	211.1	227.9	321.0	291.5	245.1	223.8	210.4
75°	1129.6	287.0	145.4	143.9	156.2	180.9	271.7	259.7	214.9	186.1	178.2
77.5°	488.0	156.2	108.7	109.9	106.1	137.1	213.7	223.1	184.2	151.3	144.2
80°	148.0	90.1	74.4	75.9	71.0	91.9	150.6	174.9	148.0	117.7	108.0
82.5°	75.9	53.8	50.8	50.1	45.2	51.9	91.2	119.6	105.8	73.6	65.0
85°	32.9	28.8	25.0	24.3	21.3	18.7	32.5	59.8	56.1	41.1	39.2
87.5°	8.2	7.5	4.9	4.5	2.6	0.4	0.0	0.0	0.0	0.0	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)