

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: P453405

Luminaire Tested: **GALN-SA4B-830-U-T4FT-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453405
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-29)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4B-830-U-T4FT-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12880 lumens
Efficiency: N/A
Efficacy: 78.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

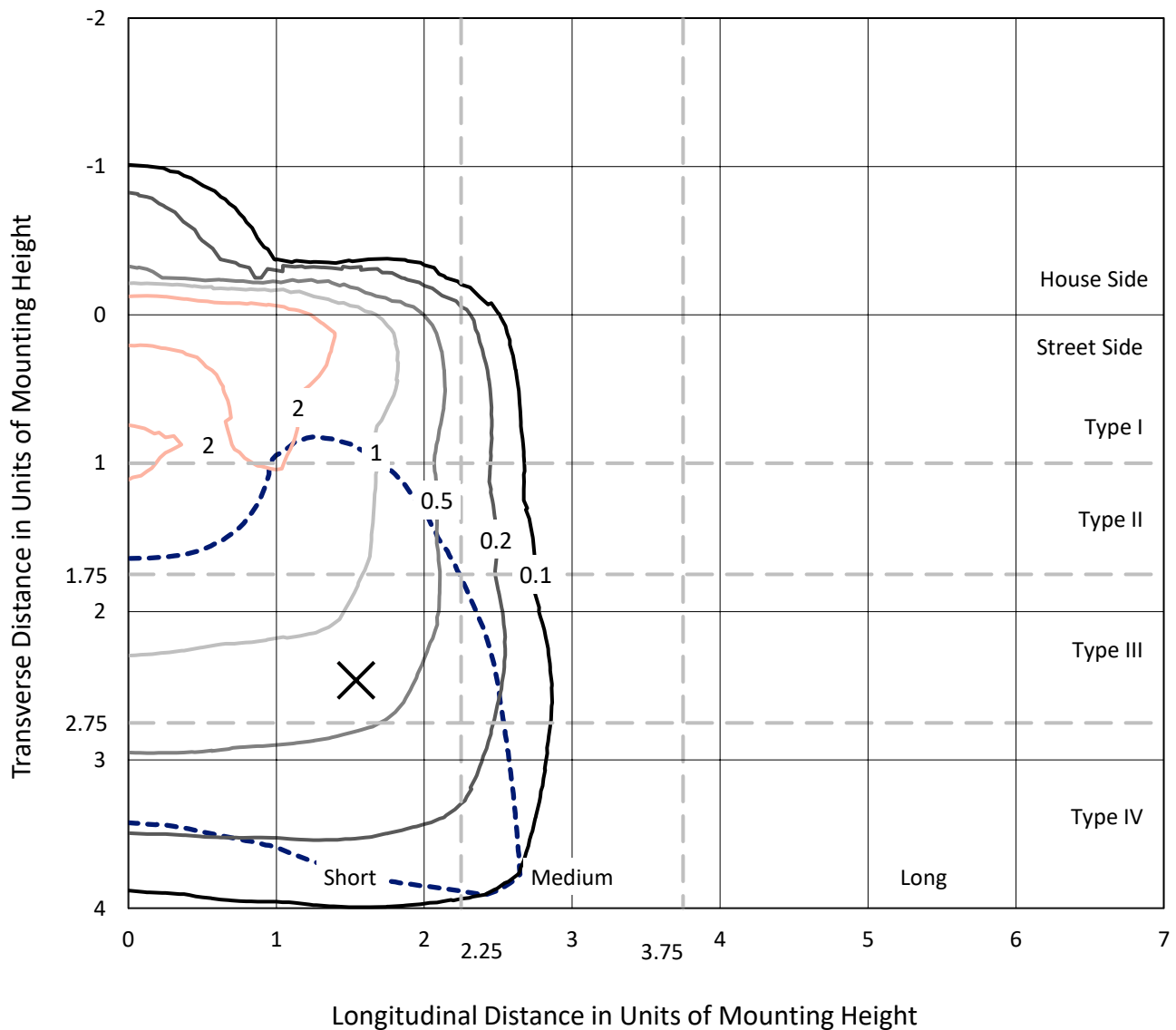
Input Watts (W): 164
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

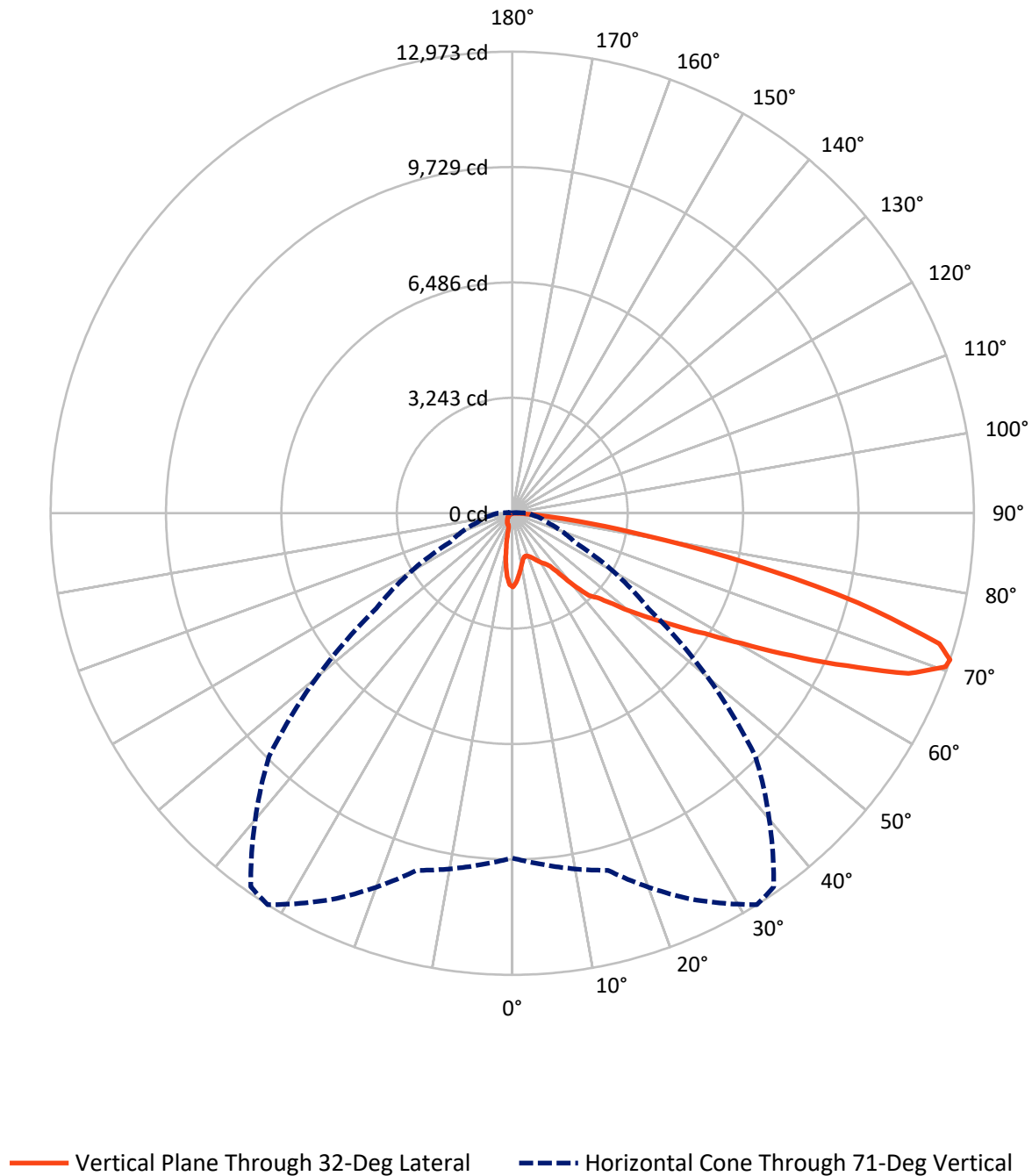
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1078.8	0.0	1078.8
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	11801.2	0.0	11801.2
	% Fixture	91.6	0.0	91.6
Total	Lumens	12880.0	0.0	12880.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.4	1.3
10°-20°	365.5	2.8
20°-30°	568.7	4.4
30°-40°	947.4	7.4
40°-50°	1762.3	13.7
50°-60°	2829.4	22.0
60°-70°	3805.7	29.5
70°-80°	2258.0	17.5
80°-90°	174.5	1.4
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°	12880.0	100.0
0°-180°	12880.0	100.0

Coefficient of Utilization



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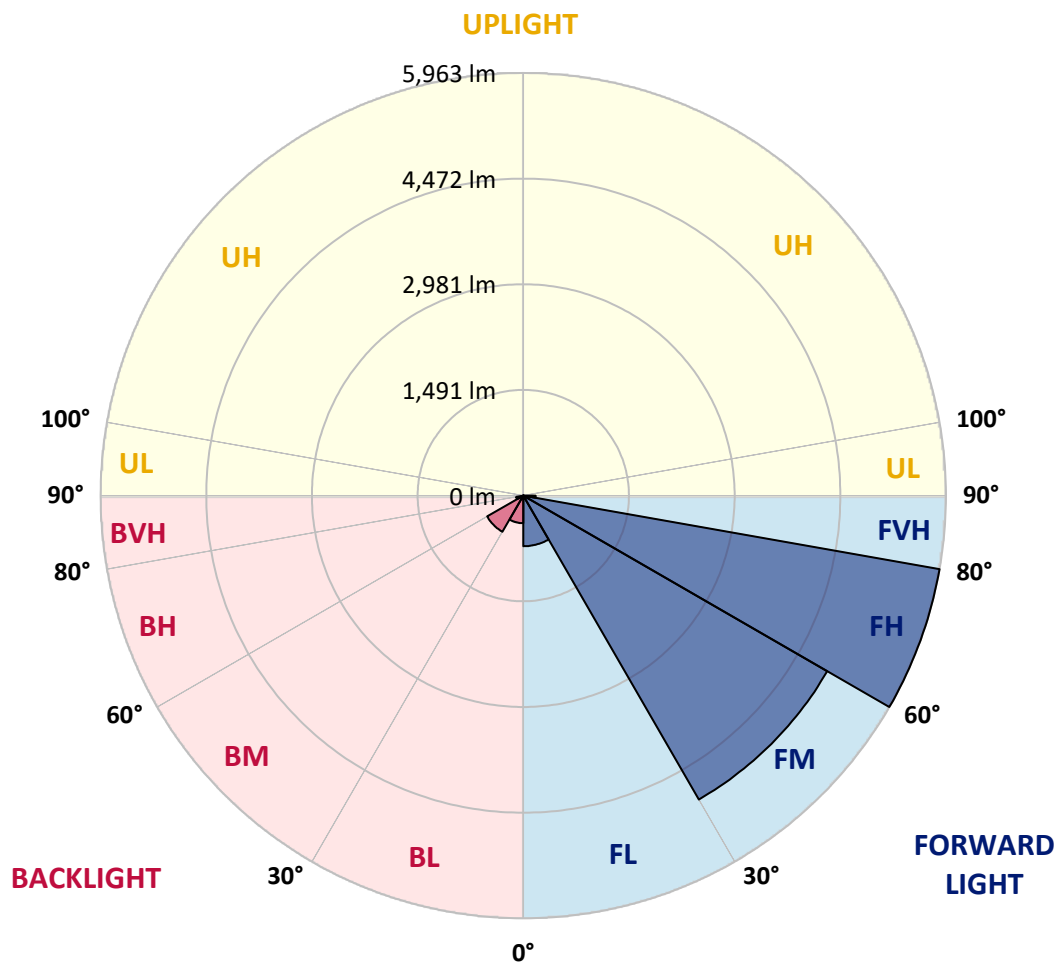
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	713.9	5.5			
FM	(30°-60°)	4950.6	38.4			
FH	(60°-80°)	5962.8	46.3			G3/7500
FVH	(80°-90°)	173.9	1.3			G2/225
BL	(0°-30°)	388.7	3.0	B1/500		
BM	(30°-60°)	588.5	4.6	B1/1000		
BH	(60°-80°)	100.9	0.8	B0/110		G0/110
BVH	(80°-90°)	0.7	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	32°	35°	45°	55°	65°	75°	85°
0°	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3
2.5°	1921.0	1940.8	1937.8	1944.8	1961.6	1968.5	1987.3	2008.0	2036.7	2056.5	2069.3
5°	1720.3	1735.2	1737.1	1771.7	1788.5	1807.3	1862.7	1923.0	1990.2	2043.6	2079.2
7.5°	1505.8	1513.7	1529.5	1575.0	1617.5	1636.3	1720.3	1825.1	1930.9	2030.8	2095.0
10°	1328.8	1337.7	1366.4	1414.8	1454.4	1479.1	1595.7	1727.2	1875.5	2023.8	2117.8
12.5°	1228.0	1232.9	1243.8	1287.3	1337.7	1364.4	1490.0	1640.2	1831.1	2026.8	2156.3
15°	1221.0	1219.1	1206.2	1224.0	1269.5	1297.2	1419.8	1580.9	1791.5	2036.7	2201.8
17.5°	1257.6	1252.7	1222.0	1222.0	1259.6	1282.3	1390.1	1549.3	1771.7	2059.4	2266.1
20°	1314.0	1306.1	1255.6	1251.7	1288.3	1312.0	1407.9	1551.3	1775.7	2102.0	2352.1
22.5°	1385.2	1376.3	1300.1	1302.1	1341.7	1365.4	1459.3	1586.8	1800.4	2154.4	2444.0
25°	1478.1	1468.2	1378.2	1374.3	1415.8	1436.6	1535.4	1650.1	1835.0	2219.6	2564.7
27.5°	1601.7	1580.9	1473.1	1467.2	1511.7	1538.4	1627.4	1735.2	1896.3	2309.6	2726.8
30°	1703.5	1680.8	1577.9	1562.1	1609.6	1630.3	1722.3	1849.8	2016.9	2466.8	2951.2
32.5°	1837.0	1803.4	1682.8	1641.2	1691.6	1718.3	1859.7	2063.4	2195.9	2632.9	3218.2
35°	2137.5	2116.8	1969.5	1824.1	1821.2	1854.8	2062.4	2278.9	2379.8	2891.9	3582.0
37.5°	2567.6	2552.8	2396.6	2201.8	2145.5	2129.6	2308.6	2516.2	2673.4	3247.8	4005.2
40°	3066.9	3032.3	2889.0	2723.8	2650.7	2604.2	2599.3	2869.2	3057.0	3731.3	4446.1
42.5°	3424.8	3361.5	3187.5	3175.7	3159.9	3111.4	2971.0	3385.3	3552.4	4251.4	4917.7
45°	3800.5	3704.6	3445.6	3401.1	3395.2	3392.2	3532.6	3996.3	4092.2	4814.9	5402.2
47.5°	4092.2	4016.1	3803.5	3783.7	3808.4	3875.7	4275.1	4644.9	4625.1	5317.2	5808.6
50°	4480.7	4423.4	4187.1	4224.7	4352.2	4462.0	5112.5	5351.8	5063.1	5712.6	6104.2
52.5°	4939.5	4833.7	4614.2	4716.1	4911.8	5094.7	6001.3	5970.7	5370.6	6010.2	6324.6
55°	5336.9	5261.8	5186.7	5292.5	5585.1	5813.5	6804.2	6434.4	5594.0	6249.5	6421.5
57.5°	6009.3	5991.5	5914.3	6022.1	6377.0	6614.3	7522.9	6794.3	5737.4	6374.1	6307.8
60°	7003.9	6975.2	6831.8	6969.3	7432.0	7804.7	8185.4	7117.6	5770.0	6325.6	5980.6
62.5°	8200.2	8102.3	7979.7	8182.4	8817.1	8981.3	8809.2	7309.4	5648.4	5940.0	5191.6
65°	9317.4	9216.6	9219.5	9646.6	10337.7	10449.5	9536.9	7280.7	5292.5	4974.1	3829.2
67.5°	10172.6	10155.8	10276.4	11109.9	12013.6	11936.5	10187.5	6851.6	4237.5	3224.1	2034.7
70°	10216.1	10248.8	10594.8	12001.7	12919.2	12796.6	10132.1	5569.3	2641.8	1483.0	801.8
71°	9690.1	9909.6	10388.2	11974.0	12972.6	12813.4	9665.4	4664.6	1937.8	1034.2	578.4
72.5°	8257.5	8373.2	9407.4	11269.1	12550.4	12210.3	8482.0	3269.6	1240.8	632.8	332.2
75°	4548.0	4832.7	6299.9	8840.9	10038.2	9739.6	5527.8	1553.2	618.9	346.0	137.4
77.5°	2165.2	2109.9	3073.8	5257.9	6806.1	6790.3	2785.1	690.1	360.9	234.3	69.2
80°	618.9	696.0	1176.5	2499.4	3778.8	3820.3	1069.8	333.2	250.1	182.9	35.6
82.5°	186.9	190.8	432.1	1105.4	1879.5	1771.7	401.4	170.1	179.9	145.3	20.8
85°	32.6	40.5	127.5	389.5	716.8	543.8	100.8	81.1	118.6	95.9	11.9
87.5°	2.0	3.0	42.5	44.5	63.3	36.6	17.8	11.9	25.7	25.7	6.9
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°	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3
2.5°	2078.2	2084.2	2080.2	2071.3	2056.5	2038.7	2014.9	1995.2	1978.4	1969.5	1980.3
5°	2091.1	2099.0	2079.2	2034.7	1967.5	1894.3	1811.3	1747.0	1696.6	1680.8	1674.8
7.5°	2110.9	2115.8	2062.4	1963.5	1821.2	1648.1	1496.9	1369.3	1270.5	1240.8	1197.3
10°	2136.6	2133.6	2032.7	1848.8	1598.7	1338.7	1104.4	930.4	798.9	751.4	747.4
12.5°	2176.1	2160.3	1995.2	1692.6	1333.7	993.6	703.9	550.7	467.7	440.0	434.0
15°	2225.5	2188.0	1935.9	1509.7	1021.3	641.7	434.0	387.6	376.7	374.7	372.7
17.5°	2283.9	2224.6	1857.7	1285.3	717.8	416.2	362.8	361.9	362.8	360.9	359.9
20°	2363.0	2263.1	1764.8	1019.3	474.6	351.0	346.0	346.0	347.0	346.0	346.0
22.5°	2447.0	2308.6	1650.1	778.1	357.9	333.2	332.2	334.2	336.2	335.2	335.2
25°	2550.8	2367.9	1498.9	532.9	320.3	318.4	319.3	323.3	327.3	328.2	327.3
27.5°	2701.1	2441.1	1336.7	366.8	293.6	295.6	305.5	315.4	321.3	322.3	322.3
30°	2870.2	2522.1	1125.1	297.6	271.9	271.9	283.8	302.5	315.4	317.4	318.4
32.5°	3087.7	2616.1	890.8	267.9	251.1	249.1	260.0	282.8	306.5	313.4	313.4
35°	3356.6	2726.8	662.4	249.1	236.3	231.4	237.3	256.1	286.7	306.5	308.5
37.5°	3672.0	2831.6	484.5	232.3	222.5	215.5	219.5	234.3	259.0	288.7	296.6
40°	3963.7	2924.5	361.9	218.5	208.6	203.7	206.6	213.6	234.3	262.0	266.9
42.5°	4282.0	2996.7	287.7	203.7	194.8	192.8	192.8	195.8	209.6	225.4	226.4
45°	4599.4	3022.4	241.2	185.9	179.9	181.9	180.9	179.0	184.9	182.9	182.9
47.5°	4825.8	2991.8	199.7	169.1	169.1	172.0	167.1	160.2	157.2	145.3	146.3
50°	4981.0	2880.1	164.1	149.3	157.2	161.2	151.3	140.4	129.5	116.7	113.7
52.5°	5045.3	2681.3	134.5	123.6	139.4	144.3	132.5	119.6	102.8	91.9	89.0
55°	5003.8	2436.1	111.7	100.8	117.7	123.6	111.7	96.9	78.1	66.2	64.3
57.5°	4820.9	2143.5	94.9	80.1	93.9	97.9	90.0	74.2	55.4	43.5	43.5
60°	4504.5	1840.9	77.1	63.3	70.2	76.1	68.2	53.4	37.6	26.7	24.7
62.5°	3862.8	1494.9	62.3	49.4	49.4	54.4	47.5	38.6	23.7	13.8	12.9
65°	2789.1	1025.3	49.4	36.6	35.6	35.6	29.7	25.7	13.8	5.9	4.0
67.5°	1515.7	578.4	39.5	27.7	24.7	23.7	18.8	14.8	5.9	1.0	0.0
70°	596.2	222.5	30.6	18.8	15.8	14.8	9.9	6.9	4.0	0.0	0.0
71°	404.4	153.2	26.7	15.8	12.9	10.9	7.9	5.9	3.0	0.0	0.0
72.5°	231.4	94.9	20.8	11.9	9.9	7.9	5.9	4.0	3.0	0.0	0.0
75°	100.8	48.4	12.9	8.9	6.9	4.9	4.0	3.0	1.0	0.0	0.0
77.5°	51.4	26.7	8.9	6.9	4.0	3.0	2.0	1.0	0.0	0.0	0.0
80°	28.7	13.8	5.9	4.0	3.0	2.0	1.0	1.0	0.0	0.0	0.0
82.5°	15.8	7.9	3.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.9	4.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.9	2.0	0.0	0.0	0.0	0.0	1.0	1.0	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)