

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: P300368

Luminaire Tested: **GLNA-AF-03-LED-E1-T4FT-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300368
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24295)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-03-LED-E1-T4FT-7027-800
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12788.7 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U0 - G3

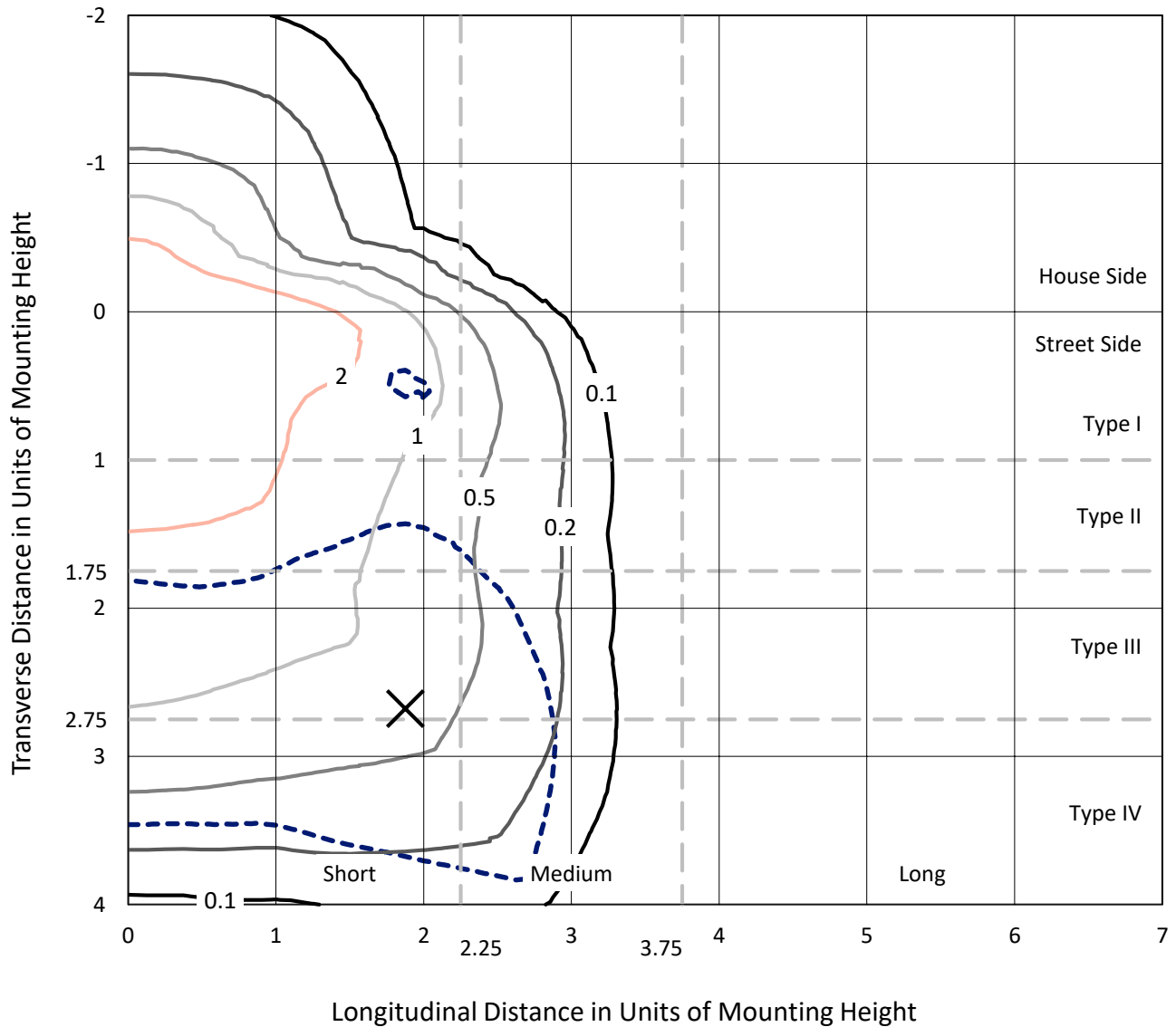
Input Watts (W): 124
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

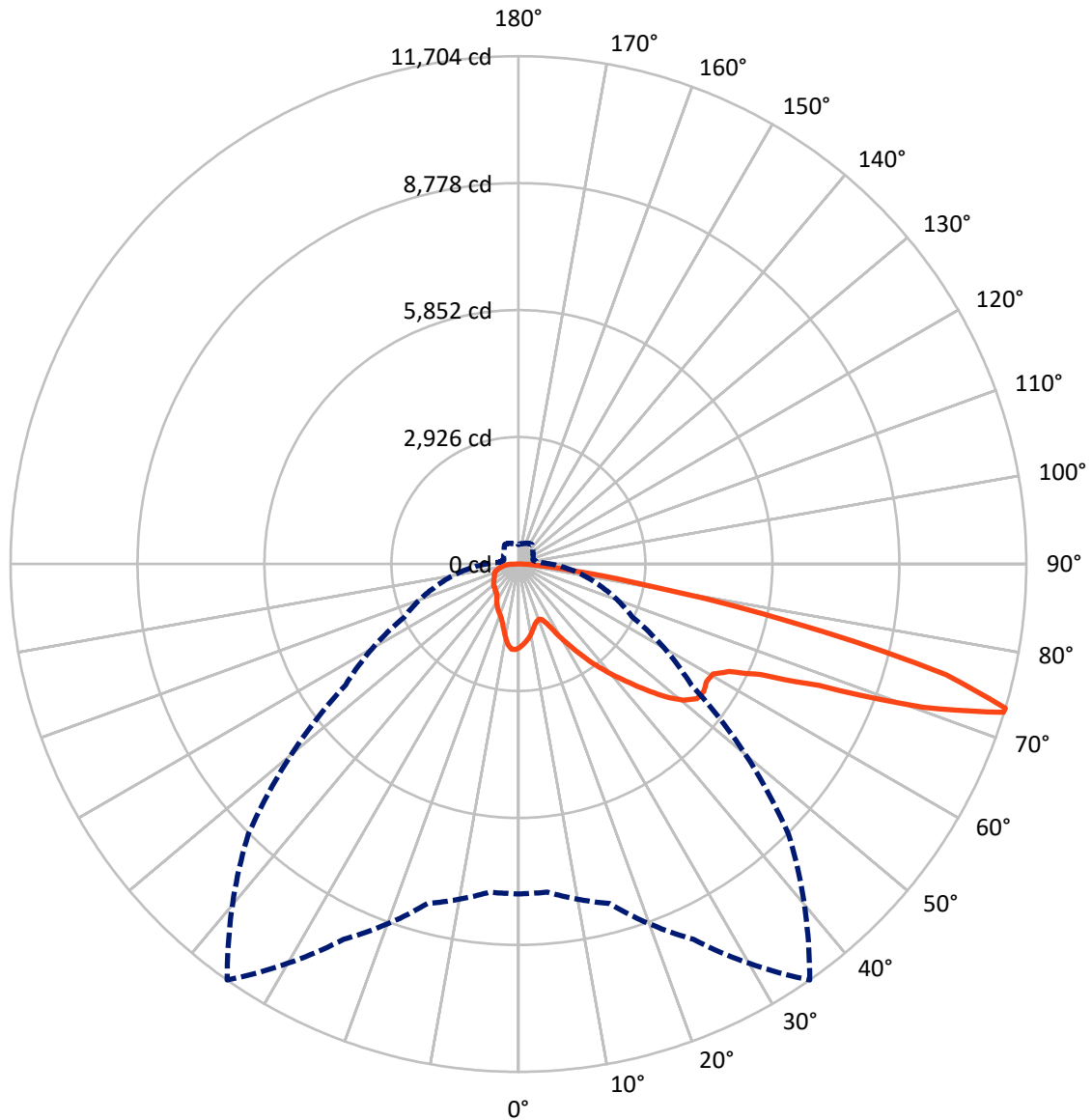
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.8 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2439.2	0.0	2439.2
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	10349.6	0.0	10349.6
	% Fixture	80.9	0.0	80.9
Total	Lumens	12788.7	0.0	12788.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.7	1.4
10°-20°	436.1	3.4
20°-30°	705.1	5.5
30°-40°	1182.3	9.2
40°-50°	1822.4	14.3
50°-60°	2445.0	19.1
60°-70°	3257.2	25.5
70°-80°	2484.3	19.4
80°-90°	281.6	2.2
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°	12788.7	100.0
0°-180°	12788.7	100.0

Coefficient of Utilization



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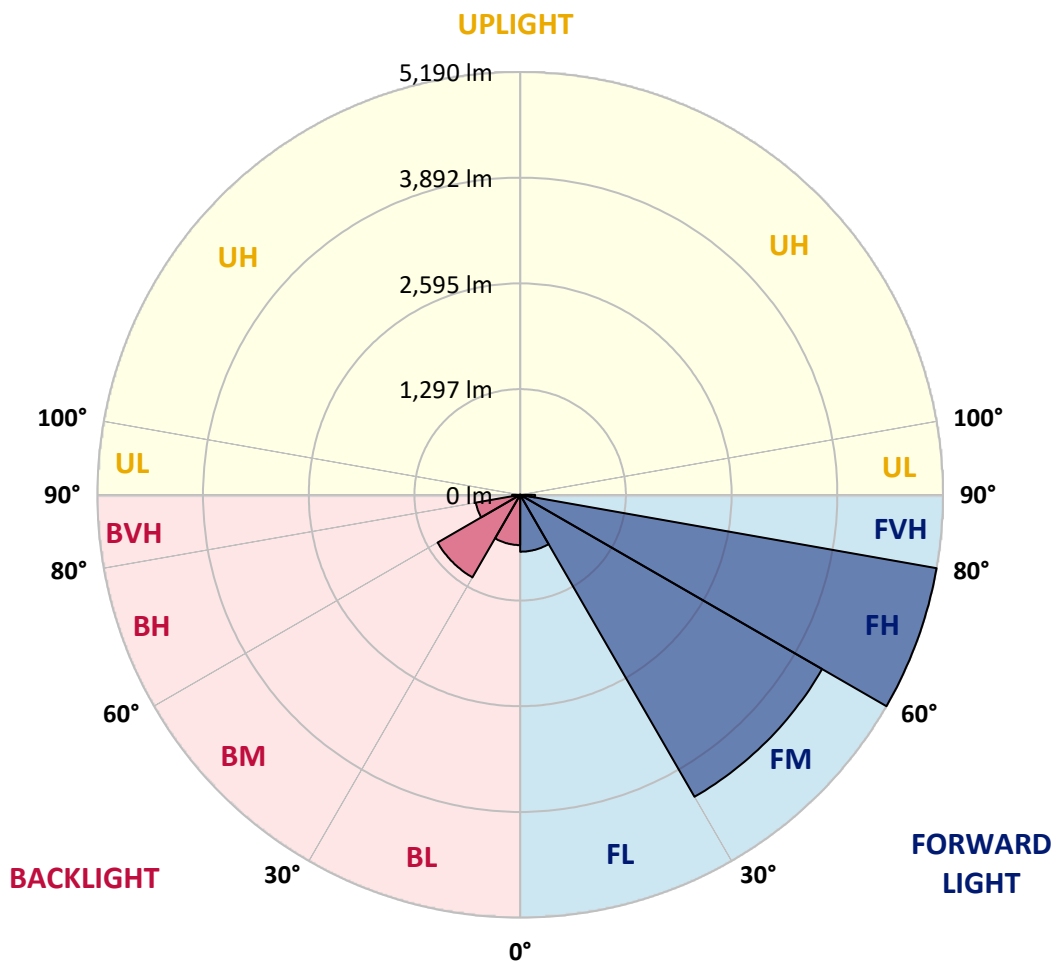
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	698.7	5.5			
FM	(30°-60°)	4279.2	33.5			
FH	(60°-80°)	5189.7	40.6			G3/7500
FVH	(80°-90°)	182.0	1.4			G2/225
BL	(0°-30°)	617.2	4.8	B2/1000		
BM	(30°-60°)	1170.5	9.2	B2/2500		
BH	(60°-80°)	551.8	4.3	B2/1000		G2/1000
BVH	(80°-90°)	99.6	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1930.2	1930.2	1930.2	1930.2	1930.2	1930.2	1930.2	1930.2	1930.2	1930.2	1930.2
2.5°	1854.1	1857.7	1853.4	1859.0	1868.2	1878.0	1884.8	1894.6	1905.7	1921.0	1924.7
5°	1766.9	1772.4	1772.4	1782.2	1800.0	1816.0	1830.7	1846.7	1870.0	1896.4	1906.9
7.5°	1671.1	1674.1	1679.6	1694.4	1720.2	1742.9	1763.8	1789.6	1821.5	1856.5	1874.9
10°	1555.6	1559.9	1568.5	1589.4	1624.4	1655.7	1685.8	1721.4	1761.9	1805.5	1828.9
12.5°	1473.9	1472.7	1476.4	1491.7	1522.4	1560.5	1604.1	1649.6	1699.3	1750.3	1778.5
15°	1446.3	1439.5	1425.4	1421.7	1438.3	1476.4	1526.7	1582.6	1642.2	1703.6	1738.6
17.5°	1463.5	1451.8	1413.1	1384.9	1382.4	1411.3	1464.7	1527.3	1596.1	1671.1	1714.7
20°	1571.6	1543.9	1448.7	1383.0	1360.3	1374.4	1421.1	1487.4	1568.5	1668.0	1723.9
22.5°	1830.1	1789.6	1587.5	1465.3	1388.6	1371.4	1406.4	1477.0	1571.6	1706.1	1777.3
25°	2206.6	2148.8	1825.8	1670.4	1512.0	1420.5	1428.5	1500.9	1615.2	1794.5	1880.5
27.5°	2503.8	2466.4	2137.2	1959.7	1736.8	1553.1	1500.3	1561.1	1704.2	1939.4	2027.2
30°	2680.7	2658.0	2470.0	2287.6	2023.6	1764.4	1637.9	1674.1	1843.6	2140.2	2212.7
32.5°	2885.8	2872.3	2780.2	2612.5	2333.1	2042.0	1855.9	1843.0	2030.3	2381.6	2414.8
35°	3098.3	3094.0	3040.0	2919.6	2665.3	2408.0	2145.2	2058.0	2233.6	2632.2	2611.3
37.5°	3296.0	3288.7	3257.4	3187.3	3012.9	2801.1	2439.9	2278.4	2452.8	2871.7	2778.9
40°	3660.2	3602.5	3495.0	3442.2	3364.2	3132.1	2673.9	2484.2	2680.1	3100.1	2923.9
42.5°	4104.2	4010.3	3810.1	3737.6	3726.6	3393.1	2833.6	2683.8	2909.1	3326.8	3066.4
45°	4453.7	4365.2	4192.7	4101.2	4141.7	3629.5	2993.9	2896.9	3145.0	3564.4	3213.1
47.5°	4826.5	4687.7	4459.2	4486.8	4575.3	3853.1	3157.3	3125.9	3403.5	3830.3	3395.5
50°	4840.0	4733.7	4633.6	4798.8	4936.4	4058.8	3361.8	3366.1	3719.8	4165.0	3638.1
52.5°	4559.3	4536.6	4695.6	4955.4	5153.8	4221.5	3594.5	3614.2	4124.5	4549.5	3904.6
55°	4461.1	4435.3	4618.9	4900.8	5183.3	4356.0	3846.9	3882.5	4614.0	4954.8	4164.4
57.5°	4700.6	4643.4	4655.7	4875.0	5111.4	4503.4	4122.1	4193.9	5145.8	5309.2	4331.5
60°	5370.0	5247.8	5015.6	5010.1	5150.1	4724.5	4440.2	4528.0	5698.5	5478.7	4266.4
62.5°	6309.0	6186.8	5752.0	5468.8	5448.0	5089.3	4830.8	4854.1	6017.9	5249.0	3869.0
65°	7325.4	7216.0	6730.3	6330.5	6137.6	5693.6	5284.6	4999.6	5913.5	4617.0	3173.8
67.5°	8559.2	8441.9	8024.2	7655.1	7469.7	6668.9	5603.3	4860.2	5250.8	3576.7	2281.5
70°	9422.0	9302.3	9137.7	9436.7	9890.6	8075.8	5644.5	4293.4	3921.8	2377.3	1373.2
72.5°	8296.3	8240.4	8540.7	9800.3	11690.6	8929.5	5102.2	3125.9	2277.8	1262.0	794.7
73°	7601.1	7588.8	8101.0	9545.4	11703.5	8798.0	4864.5	2905.5	1953.6	1116.5	726.5
75°	3432.4	3531.3	4653.9	7291.0	10168.2	7249.8	3423.8	1666.8	1103.6	771.3	548.4
77.5°	824.8	859.2	1456.1	3462.5	6421.4	4320.4	1551.3	824.2	705.6	544.7	400.4
80°	351.3	363.0	560.7	1279.2	3023.4	1739.8	714.8	552.1	488.2	380.1	280.7
82.5°	195.3	207.6	318.1	580.4	1220.3	593.3	436.0	384.4	321.2	229.1	182.4
85°	110.5	117.3	186.1	324.3	517.1	238.3	261.0	255.5	181.2	117.9	89.7
87.5°	52.2	56.5	89.7	150.5	202.7	93.3	132.7	146.2	113.6	71.9	46.7
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1930.2	1930.2	1930.2	1930.2	1930.2	1930.2	1930.2	1930.2	1930.2	1930.2
2.5°	1929.0	1940.0	1952.9	1959.7	1965.8	1973.2	1980.6	1980.6	1981.8	1982.4
5°	1915.5	1938.2	1958.5	1967.1	1968.9	1968.9	1967.1	1957.2	1948.6	1952.3
7.5°	1887.2	1920.4	1937.6	1934.5	1911.2	1884.2	1861.4	1833.8	1819.7	1817.2
10°	1846.7	1884.8	1887.8	1857.1	1799.4	1741.7	1693.8	1647.1	1625.0	1619.5
12.5°	1801.9	1836.9	1817.2	1754.0	1661.2	1577.1	1516.3	1469.0	1448.1	1442.6
15°	1765.6	1789.6	1739.8	1640.3	1523.7	1434.6	1384.3	1349.2	1334.5	1330.2
17.5°	1746.6	1751.5	1660.6	1526.1	1402.1	1327.8	1296.4	1279.9	1274.3	1271.3
20°	1755.8	1721.4	1585.1	1419.9	1302.6	1250.4	1243.0	1238.7	1237.5	1235.6
22.5°	1801.9	1712.2	1515.7	1319.2	1215.4	1192.6	1198.8	1198.2	1196.9	1195.7
25°	1884.2	1720.2	1448.1	1223.4	1142.3	1137.4	1148.4	1148.4	1143.5	1143.5
27.5°	1992.9	1736.8	1372.6	1132.5	1076.0	1076.6	1085.2	1082.7	1077.2	1073.5
30°	2125.5	1747.2	1284.1	1050.8	1013.9	1011.5	1013.9	1003.5	986.9	985.7
32.5°	2261.2	1734.3	1181.6	978.3	948.2	942.7	940.8	926.1	907.1	901.5
35°	2384.1	1687.0	1077.2	920.6	885.6	873.3	881.9	877.0	859.8	855.5
37.5°	2473.7	1599.2	983.2	869.6	840.7	837.7	843.2	845.0	824.8	820.5
40°	2533.9	1480.1	902.8	826.6	832.1	820.5	802.1	789.2	783.0	781.2
42.5°	2582.4	1356.0	835.2	806.4	834.0	800.2	760.3	739.4	750.5	755.4
45°	2638.3	1235.0	778.7	781.2	824.8	776.9	731.4	711.2	715.5	716.7
47.5°	2715.1	1087.6	717.9	740.6	794.1	760.9	713.6	684.8	664.5	655.3
50°	2821.3	913.2	654.7	695.2	764.0	749.2	686.0	655.3	617.8	609.2
52.5°	2895.0	750.5	602.5	657.1	737.0	725.9	663.9	624.0	584.7	577.3
55°	2855.1	623.3	557.0	614.7	701.3	697.0	645.5	592.0	561.3	555.2
57.5°	2655.5	542.9	522.0	574.8	657.7	672.5	620.9	565.0	542.9	538.6
60°	2274.7	492.5	499.9	547.8	622.1	647.9	596.3	550.3	535.5	532.5
62.5°	1765.0	458.8	483.3	528.2	594.5	630.7	582.8	548.4	542.9	539.2
65°	1264.5	431.7	465.5	508.5	569.3	614.7	577.9	546.0	547.2	544.1
67.5°	859.2	407.8	444.0	486.4	544.7	600.6	571.1	537.4	552.7	549.0
70°	601.2	384.4	418.8	458.1	514.0	581.0	558.9	524.5	523.2	508.5
72.5°	469.2	353.7	384.4	418.8	474.7	553.3	534.3	495.6	475.3	460.0
73°	447.7	346.4	375.8	410.2	466.1	546.6	527.5	487.6	464.9	450.8
75°	370.3	314.4	341.5	372.2	429.3	514.6	494.4	451.4	422.5	413.9
77.5°	291.1	269.0	294.8	322.4	378.3	468.0	445.2	404.1	388.1	380.8
80°	215.6	222.9	245.7	270.2	327.9	418.2	398.0	356.8	428.0	410.2
82.5°	151.7	168.9	189.8	211.9	275.1	369.7	345.1	302.8	313.2	260.4
85°	89.7	110.5	130.2	149.2	198.4	306.5	285.0	241.4	197.8	188.5
87.5°	52.2	61.4	66.9	86.6	136.3	230.9	200.8	178.7	102.6	69.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)