

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: P300365

Luminaire Tested: **GLNA-AF-02-LED-E1-T4FT-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300365  
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-02-LED-E1-T4FT-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 4000K 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: 9864.3 lumens  
Efficiency: N/A  
Efficacy: 116.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G2

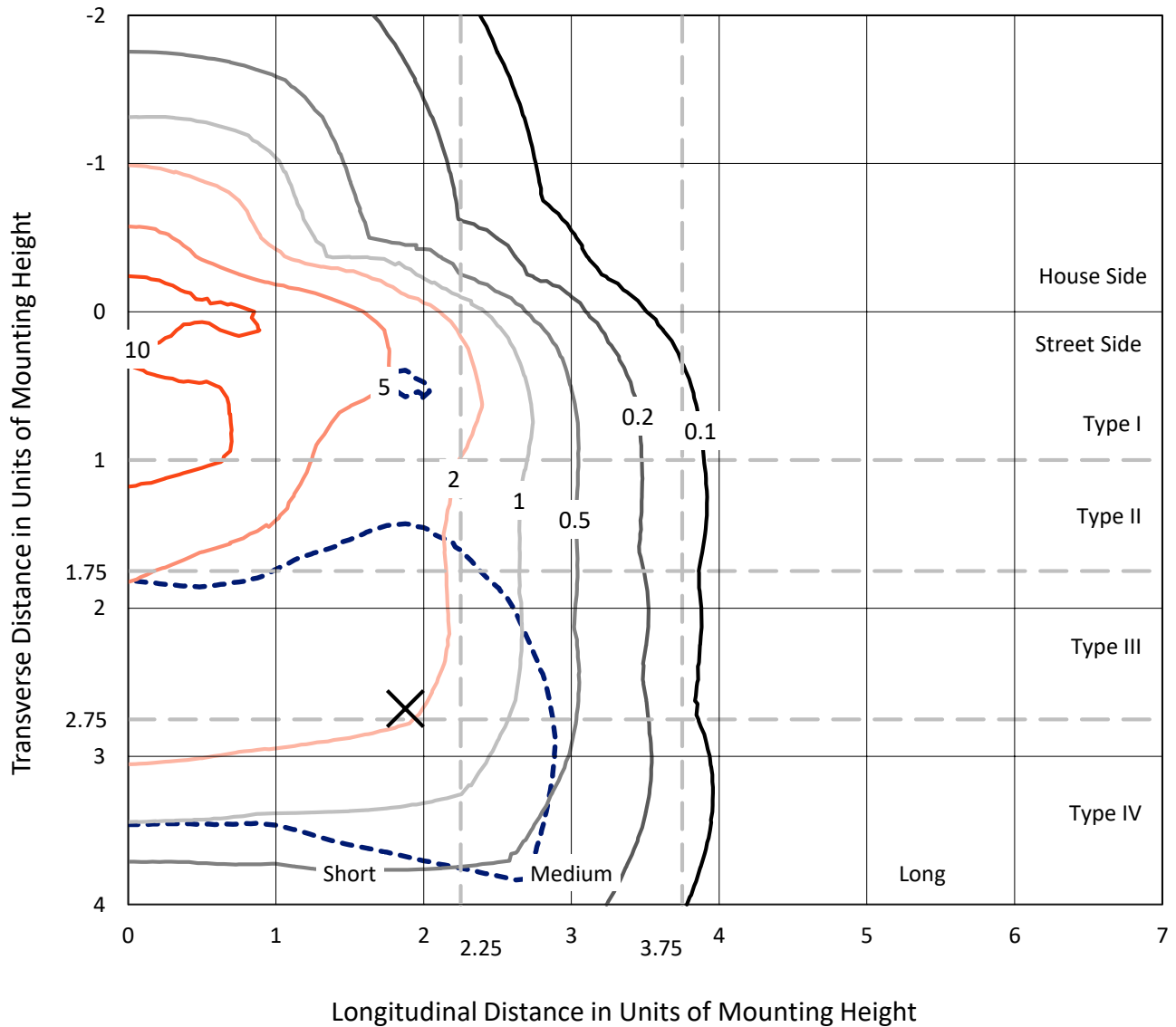
Input Watts (W): 85  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

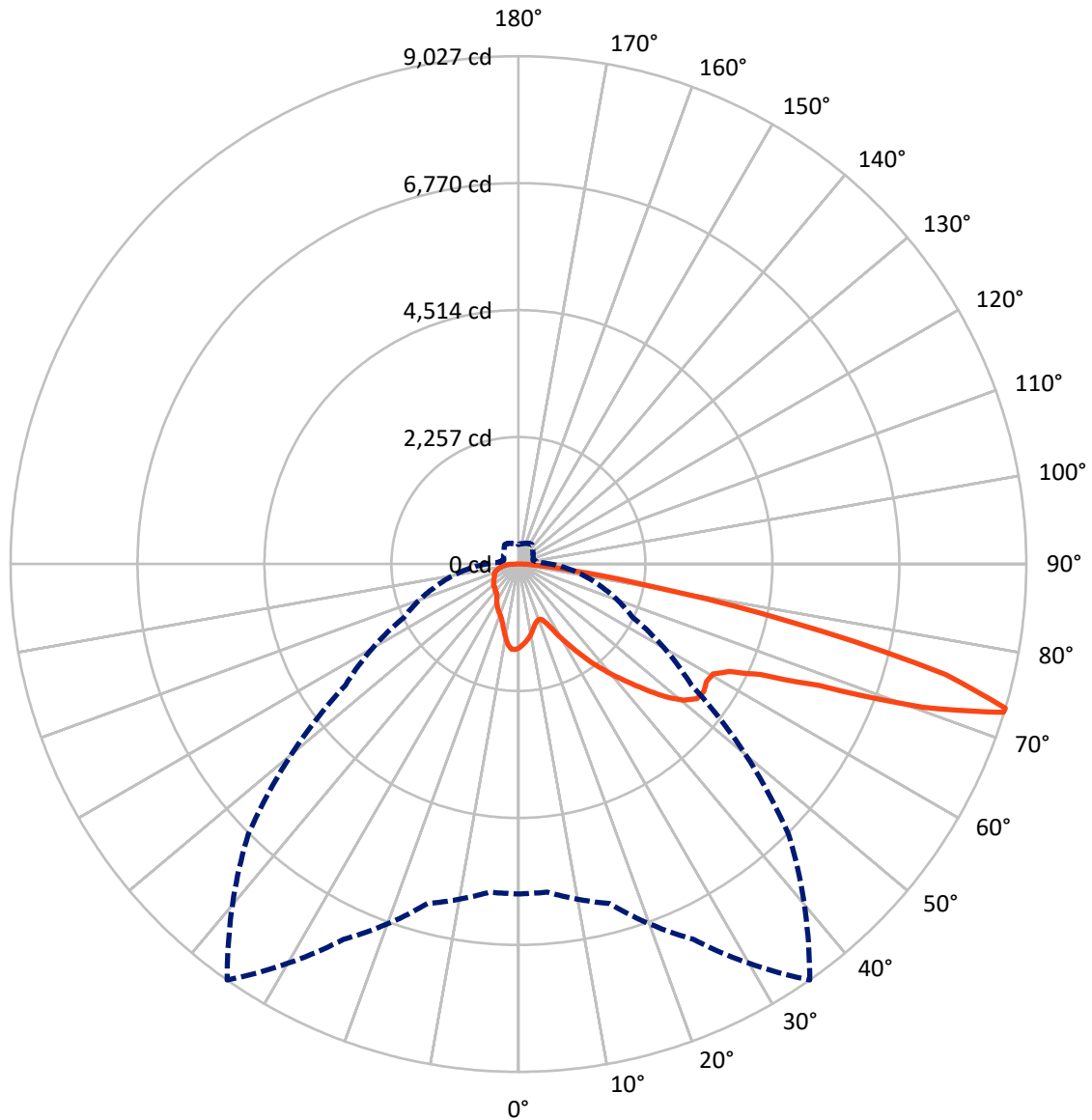
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14.9 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
<b>House Side</b>	Lumens	1881.4	0.0	1881.4
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	7982.9	0.0	7982.9
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	9864.3	0.0	9864.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.8	1.4
10°-20°	336.4	3.4
20°-30°	543.8	5.5
30°-40°	911.9	9.2
40°-50°	1405.7	14.3
50°-60°	1885.9	19.1
60°-70°	2512.4	25.5
70°-80°	1916.2	19.4
80°-90°	217.2	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°	9864.3	100.0
0°-180°	9864.3	100.0

**Coefficient of Utilization**



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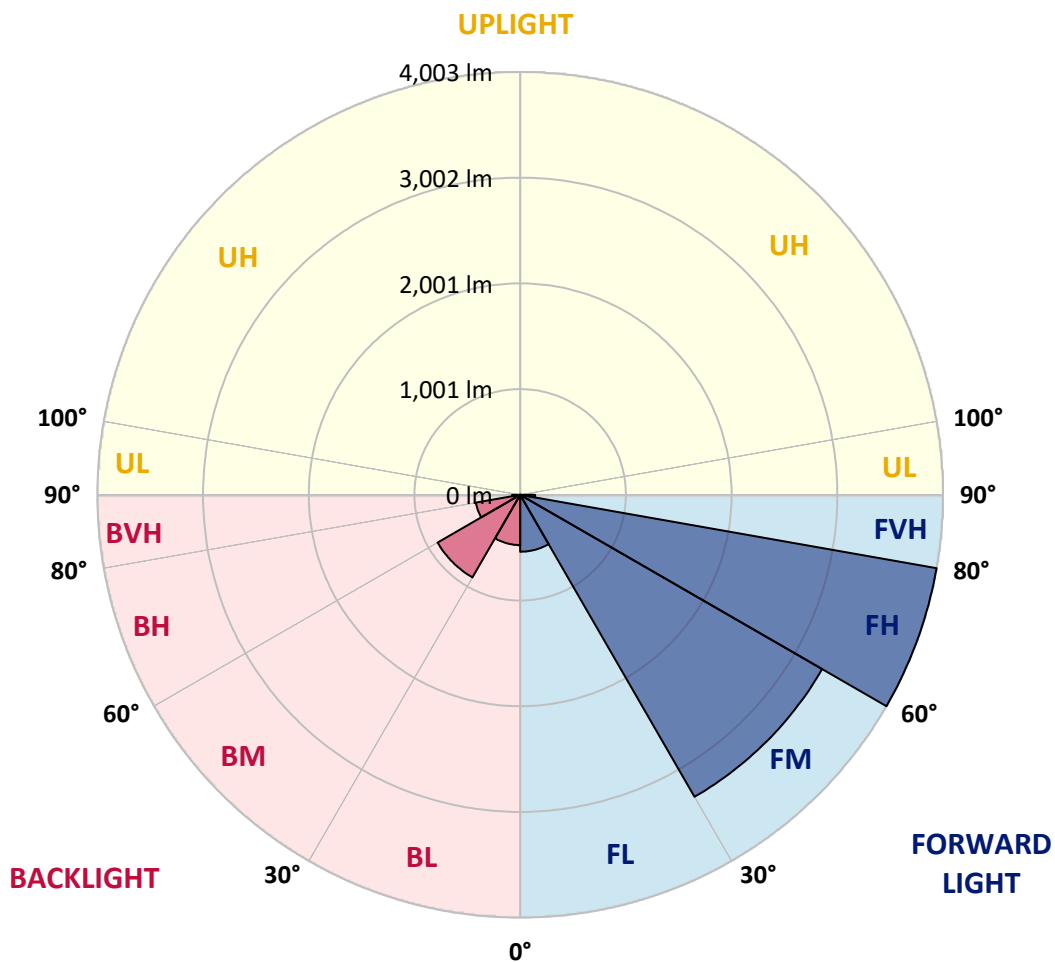
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	538.9	5.5			
FM	(30°-60°)	3300.7	33.5			
FH	(60°-80°)	4002.9	40.6			G2/5000
FVH	(80°-90°)	140.4	1.4			G2/225
BL	(0°-30°)	476.1	4.8	B1/500		
BM	(30°-60°)	902.9	9.2	B1/1000		
BH	(60°-80°)	425.7	4.3	B1/500		G1/500
BVH	(80°-90°)	76.8	0.8			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 Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1488.8	1488.8	1488.8	1488.8	1488.8	1488.8	1488.8	1488.8	1488.8	1488.8	1488.8
2.5°	1430.1	1432.9	1429.6	1433.9	1441.0	1448.6	1453.8	1461.4	1469.9	1481.7	1484.6
5°	1362.8	1367.1	1367.1	1374.7	1388.4	1400.7	1412.1	1424.4	1442.4	1462.8	1470.8
7.5°	1288.9	1291.3	1295.6	1306.9	1326.8	1344.4	1360.5	1380.4	1405.0	1432.0	1446.2
10°	1199.9	1203.2	1209.8	1225.9	1252.9	1277.1	1300.3	1327.8	1359.0	1392.7	1410.7
12.5°	1136.9	1135.9	1138.8	1150.6	1174.3	1203.7	1237.3	1272.4	1310.7	1350.0	1371.8
15°	1115.6	1110.3	1099.5	1096.6	1109.4	1138.8	1177.6	1220.7	1266.7	1314.0	1341.0
17.5°	1128.8	1119.8	1090.0	1068.2	1066.3	1088.6	1129.8	1178.1	1231.1	1288.9	1322.6
20°	1212.2	1190.9	1117.5	1066.8	1049.2	1060.1	1096.1	1147.3	1209.8	1286.6	1329.7
22.5°	1411.6	1380.4	1224.5	1130.2	1071.0	1057.8	1084.8	1139.2	1212.2	1315.9	1370.9
25°	1702.0	1657.5	1408.3	1288.5	1166.2	1095.7	1101.8	1157.7	1245.8	1384.1	1450.5
27.5°	1931.3	1902.4	1648.5	1511.6	1339.6	1198.0	1157.2	1204.1	1314.5	1495.9	1563.7
30°	2067.7	2050.2	1905.2	1764.5	1560.8	1360.9	1263.4	1291.3	1422.0	1650.8	1706.7
32.5°	2225.9	2215.5	2144.4	2015.1	1799.6	1575.0	1431.5	1421.6	1566.0	1837.0	1862.6
35°	2389.8	2386.5	2344.8	2252.0	2055.9	1857.4	1654.6	1587.4	1722.8	2030.3	2014.2
37.5°	2542.3	2536.7	2512.5	2458.5	2324.0	2160.5	1882.0	1757.4	1892.0	2215.0	2143.5
40°	2823.2	2778.7	2695.8	2655.1	2594.9	2415.9	2062.5	1916.1	2067.2	2391.2	2255.3
42.5°	3165.7	3093.3	2938.8	2882.9	2874.4	2617.2	2185.6	2070.1	2243.9	2566.0	2365.2
45°	3435.3	3367.0	3233.9	3163.4	3194.6	2799.6	2309.3	2234.4	2425.8	2749.3	2478.4
47.5°	3722.8	3615.7	3439.5	3460.8	3529.1	2972.0	2435.3	2411.1	2625.2	2954.5	2619.1
50°	3733.2	3651.3	3574.1	3701.5	3807.6	3130.7	2593.0	2596.3	2869.2	3212.6	2806.2
52.5°	3516.7	3499.2	3621.9	3822.3	3975.3	3256.2	2772.6	2787.7	3181.4	3509.2	3011.8
55°	3440.9	3421.1	3562.7	3780.1	3998.0	3359.9	2967.2	2994.7	3558.9	3821.8	3212.1
57.5°	3625.7	3581.6	3591.1	3760.2	3942.6	3473.6	3179.5	3234.9	3969.1	4095.1	3341.0
60°	4142.0	4047.8	3868.7	3864.4	3972.4	3644.2	3424.8	3492.6	4395.4	4225.9	3290.8
62.5°	4866.3	4772.0	4436.7	4218.3	4202.2	3925.5	3726.1	3744.1	4641.8	4048.7	2984.3
65°	5650.3	5566.0	5191.3	4882.9	4734.1	4391.7	4076.2	3856.4	4561.2	3561.3	2448.1
67.5°	6601.9	6511.5	6189.3	5904.7	5761.6	5143.9	4322.0	3748.9	4050.1	2758.8	1759.8
70°	7267.5	7175.1	7048.2	7278.9	7628.9	6229.1	4353.8	3311.6	3025.0	1833.7	1059.2
72.5°	6399.2	6356.1	6587.7	7559.3	9017.3	6887.6	3935.5	2411.1	1756.9	973.5	613.0
73°	5863.0	5853.5	6248.6	7362.7	9027.3	6786.2	3752.2	2241.1	1506.8	861.2	560.4
75°	2647.5	2723.8	3589.7	5623.7	7843.0	5592.0	2640.9	1285.6	851.2	595.0	423.0
77.5°	636.2	662.7	1123.1	2670.7	4953.0	3332.5	1196.6	635.7	544.3	420.2	308.9
80°	271.0	280.0	432.5	986.7	2332.0	1342.0	551.4	425.9	376.6	293.2	216.5
82.5°	150.6	160.1	245.4	447.6	941.2	457.6	336.3	296.5	247.7	176.7	140.7
85°	85.3	90.5	143.5	250.1	398.9	183.8	201.3	197.1	139.7	91.0	69.2
87.5°	40.3	43.6	69.2	116.1	156.3	72.0	102.3	112.7	87.6	55.4	36.0
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°	1488.8	1488.8	1488.8	1488.8	1488.8	1488.8	1488.8	1488.8	1488.8	1488.8
2.5°	1487.9	1496.4	1506.4	1511.6	1516.3	1522.0	1527.7	1527.7	1528.6	1529.1
5°	1477.5	1495.0	1510.6	1517.3	1518.7	1518.7	1517.3	1509.7	1503.0	1505.9
7.5°	1455.7	1481.3	1494.5	1492.2	1474.1	1453.3	1435.8	1414.5	1403.6	1401.7
10°	1424.4	1453.8	1456.1	1432.5	1387.9	1343.4	1306.5	1270.5	1253.4	1249.1
12.5°	1389.8	1416.8	1401.7	1352.9	1281.4	1216.5	1169.6	1133.1	1117.0	1112.7
15°	1361.9	1380.4	1342.0	1265.2	1175.2	1106.6	1067.7	1040.7	1029.3	1026.0
17.5°	1347.2	1351.0	1280.9	1177.1	1081.5	1024.1	1000.0	987.2	982.9	980.6
20°	1354.3	1327.8	1222.6	1095.2	1004.7	964.5	958.8	955.4	954.5	953.1
22.5°	1389.8	1320.7	1169.1	1017.5	937.4	919.9	924.7	924.2	923.2	922.3
25°	1453.3	1326.8	1117.0	943.6	881.1	877.3	885.8	885.8	882.0	882.0
27.5°	1537.2	1339.6	1058.7	873.5	829.9	830.4	837.0	835.1	830.9	828.0
30°	1639.5	1347.7	990.5	810.5	782.1	780.2	782.1	774.0	761.2	760.3
32.5°	1744.2	1337.7	911.4	754.6	731.4	727.1	725.7	714.3	699.7	695.4
35°	1838.9	1301.2	830.9	710.1	683.1	673.6	680.2	676.4	663.2	659.9
37.5°	1908.1	1233.5	758.4	670.8	648.5	646.1	650.4	651.8	636.2	632.9
40°	1954.5	1141.6	696.3	637.6	641.9	632.9	618.7	608.7	604.0	602.5
42.5°	1991.9	1045.9	644.2	622.0	643.3	617.2	586.4	570.3	578.9	582.6
45°	2035.0	952.6	600.6	602.5	636.2	599.2	564.2	548.5	551.9	552.8
47.5°	2094.2	838.9	553.8	571.3	612.5	586.9	550.4	528.2	512.5	505.4
50°	2176.2	704.4	505.0	536.2	589.3	577.9	529.1	505.4	476.5	469.9
52.5°	2233.0	578.9	464.7	506.9	568.4	559.9	512.1	481.3	451.0	445.3
55°	2202.2	480.8	429.6	474.2	541.0	537.6	497.9	456.6	433.0	428.2
57.5°	2048.3	418.7	402.6	443.4	507.3	518.7	478.9	435.8	418.7	415.4
60°	1754.6	379.9	385.6	422.5	479.9	499.8	460.0	424.4	413.1	410.7
62.5°	1361.4	353.9	372.8	407.4	458.5	486.5	449.5	423.0	418.7	415.9
65°	975.3	333.0	359.1	392.2	439.1	474.2	445.8	421.1	422.1	419.7
67.5°	662.7	314.5	342.5	375.2	420.2	463.3	440.5	414.5	426.3	423.5
70°	463.8	296.5	323.1	353.4	396.5	448.1	431.1	404.5	403.6	392.2
72.5°	361.9	272.9	296.5	323.1	366.2	426.8	412.1	382.3	366.6	354.8
73°	345.3	267.2	289.9	316.4	359.5	421.6	406.9	376.1	358.6	347.7
75°	285.6	242.5	263.4	287.1	331.1	397.0	381.3	348.2	325.9	319.3
77.5°	224.5	207.5	227.4	248.7	291.8	361.0	343.4	311.7	299.4	293.7
80°	166.3	172.0	189.5	208.4	253.0	322.6	307.0	275.2	330.2	316.4
82.5°	117.0	130.3	146.4	163.4	212.2	285.2	266.2	233.5	241.6	200.8
85°	69.2	85.3	100.4	115.1	153.0	236.4	219.8	186.2	152.5	145.4
87.5°	40.3	47.4	51.6	66.8	105.2	178.1	154.9	137.8	79.1	53.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)