

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: LUMARK

Report Number: P270244

Luminaire Tested: **NAV-AF-01-D-UNV-5MQ-7027-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P270244  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24129)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-AF-01-D-UNV-5MQ-7027-1200  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 1200mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6201 lumens  
Efficiency: N/A  
Efficacy: 92.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B3 - U0 - G1

Input Watts (W): 67  
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

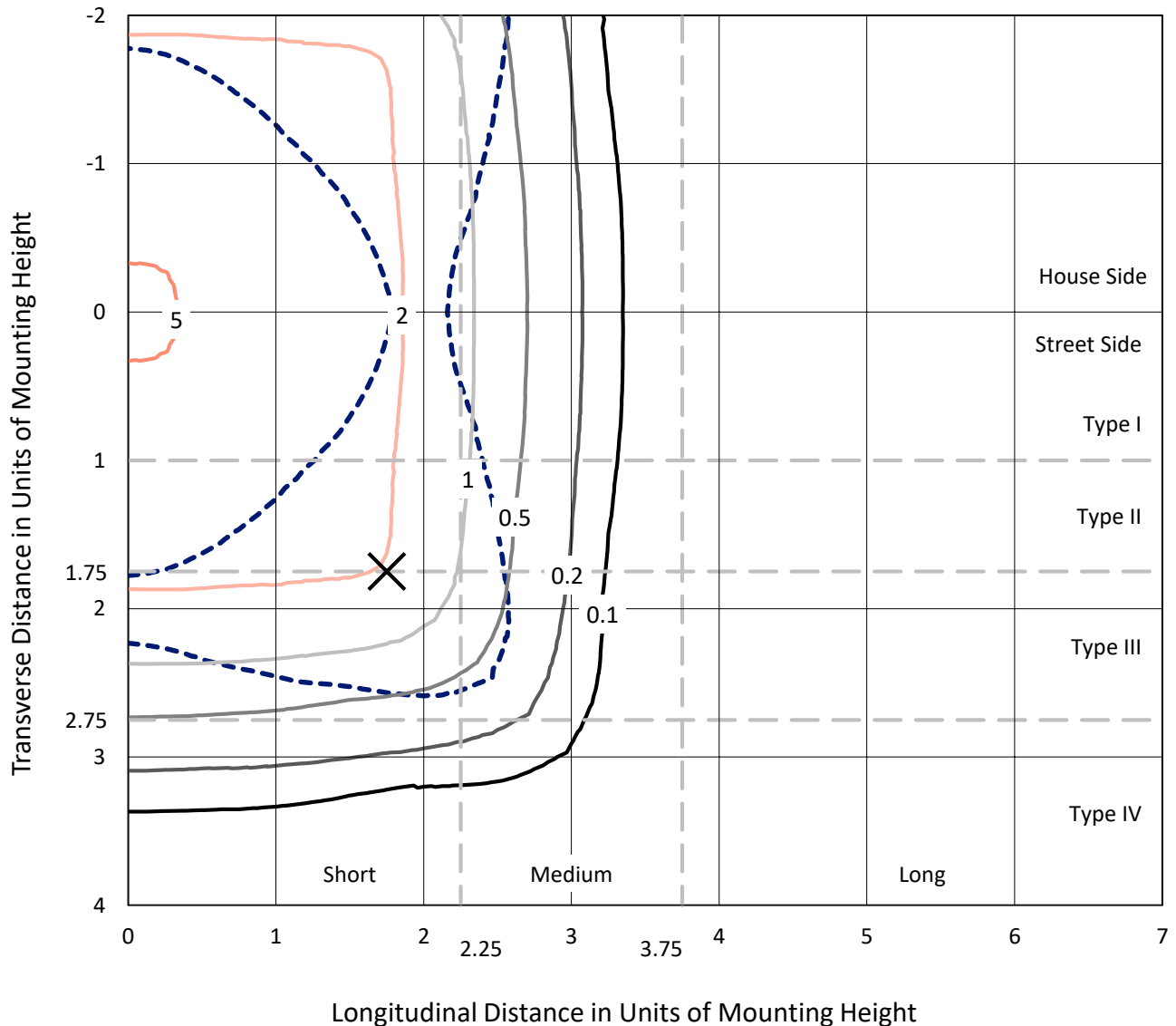


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### Iso-Footcandle Lines of Horizontal Illumination

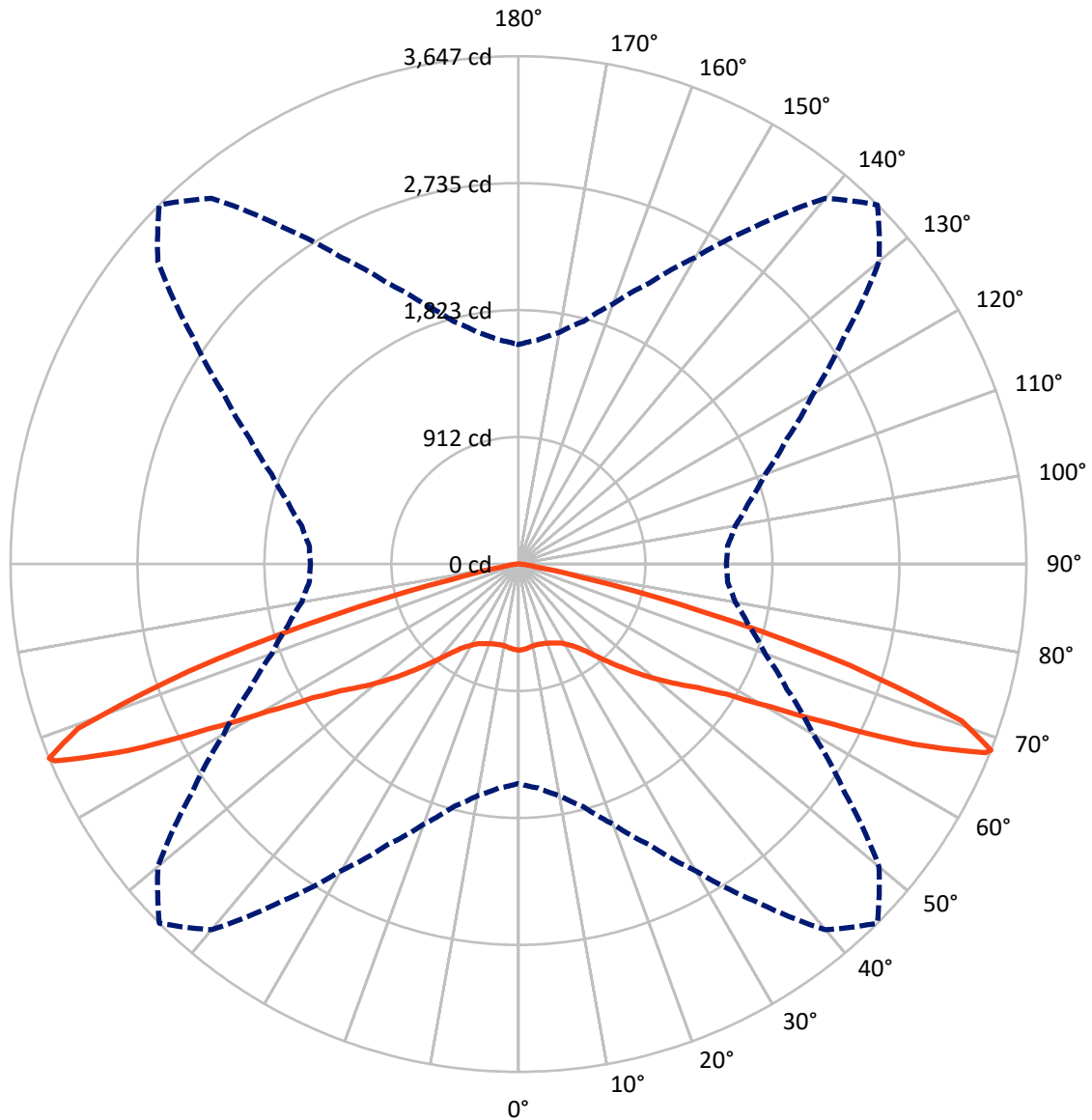
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.2 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 68-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3100.5	0.0	3100.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	3100.5	0.0	3100.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	6201.0	0.0	6201.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.9	0.9
10°-20°	167.9	2.7
20°-30°	285.4	4.6
30°-40°	467.0	7.5
40°-50°	834.7	13.5
50°-60°	1409.6	22.7
60°-70°	2185.8	35.2
70°-80°	751.5	12.1
80°-90°	41.3	0.7
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°	6201.0	100.0
0°-180°	6201.0	100.0



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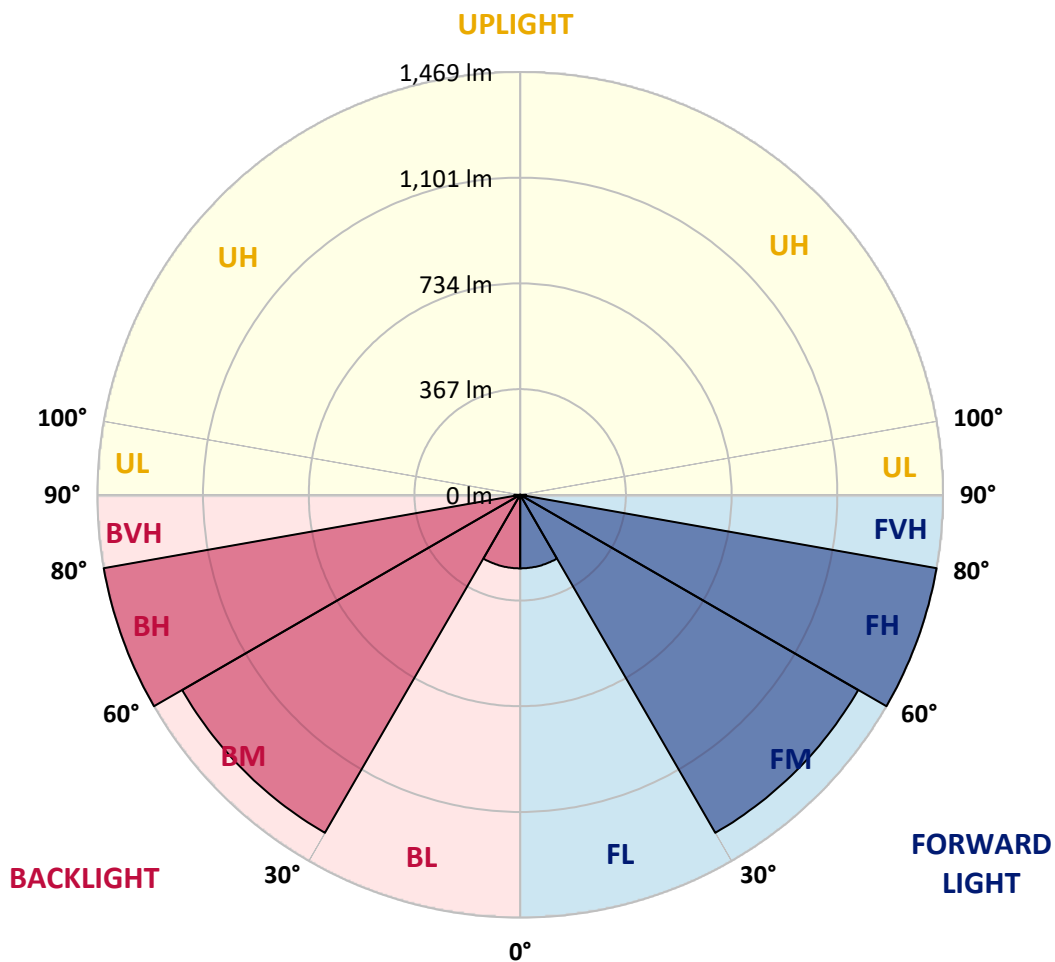
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	255.6	4.1			
FM	(30°-60°)	1355.6	21.9			
FH	(60°-80°)	1468.6	23.7			G1/1800
FVH	(80°-90°)	20.6	0.3			G1/100
BL	(0°-30°)	255.6	4.1	B1/500		
BM	(30°-60°)	1355.6	21.9	B2/2500		
BH	(60°-80°)	1468.6	23.7	B3/2500		G1/1800
BVH	(80°-90°)	20.6	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	618.6	618.6	618.6	618.6	618.6	618.6	618.6	618.6	618.6	618.6	618.6
2.5°	621.2	621.2	621.9	621.5	620.5	619.3	618.3	617.0	616.2	615.5	614.8
5°	614.8	614.8	615.9	615.2	614.4	613.3	612.5	611.3	610.6	609.8	610.2
7.5°	606.4	607.2	608.0	607.6	606.0	605.6	604.5	604.1	603.4	602.3	602.7
10°	599.2	599.6	600.3	600.0	599.6	598.5	598.0	597.7	597.4	595.8	595.3
12.5°	592.1	592.7	593.5	593.9	593.5	593.9	594.3	594.7	594.3	593.5	593.5
15°	586.4	587.0	588.2	589.3	589.6	592.1	593.5	595.0	596.1	596.6	595.3
17.5°	583.3	584.3	586.0	588.2	590.0	592.7	595.3	597.7	599.6	600.0	598.8
20°	582.9	584.0	586.4	589.0	592.3	595.8	600.0	603.4	605.3	606.4	605.3
22.5°	585.5	587.0	590.0	593.5	597.7	602.3	607.6	611.3	615.2	616.6	615.5
25°	593.2	594.7	598.0	602.3	606.7	612.5	617.9	622.7	626.6	628.5	626.9
27.5°	609.1	609.5	613.3	617.9	623.2	628.0	634.9	637.2	640.2	642.1	640.2
30°	631.5	632.2	635.6	642.8	647.8	654.2	658.1	660.3	663.8	665.6	663.4
32.5°	665.6	666.5	669.4	676.2	680.8	685.8	690.3	691.9	695.3	697.5	694.8
35°	713.9	715.4	718.0	722.5	726.4	730.2	733.6	732.5	734.8	737.8	735.2
37.5°	780.0	779.5	780.4	783.7	787.5	789.8	795.1	792.5	794.8	797.4	795.9
40°	857.1	857.1	856.7	862.7	864.3	866.5	872.3	868.8	871.9	874.9	872.3
42.5°	944.7	946.3	948.3	953.1	957.2	958.0	960.6	959.2	963.0	965.7	963.0
45°	1045.7	1048.1	1050.3	1061.6	1063.7	1065.1	1067.0	1062.1	1066.3	1068.5	1067.7
47.5°	1150.5	1154.7	1159.7	1171.4	1179.0	1182.4	1184.0	1178.2	1178.7	1182.1	1182.4
50°	1269.0	1273.5	1278.5	1291.9	1298.9	1305.1	1307.0	1300.6	1301.4	1304.0	1304.7
52.5°	1378.4	1383.7	1394.3	1412.1	1422.5	1433.1	1433.9	1425.9	1429.3	1431.2	1429.7
55°	1481.2	1488.1	1502.1	1526.1	1544.7	1565.6	1575.1	1566.4	1566.4	1564.8	1564.0
57.5°	1601.3	1608.9	1623.2	1651.1	1676.9	1706.9	1732.7	1741.5	1757.4	1762.7	1754.3
60°	1782.1	1790.1	1804.9	1841.3	1874.0	1917.6	1960.1	1994.6	2050.9	2081.3	2054.0
62.5°	1947.3	1959.4	1994.2	2058.0	2128.8	2209.7	2303.4	2370.3	2472.3	2523.2	2454.4
65°	1909.6	1934.3	2002.6	2102.9	2248.6	2424.2	2615.1	2798.6	3009.7	3117.8	2978.2
67.5°	1668.2	1689.1	1762.7	1879.3	2061.2	2303.1	2600.0	2979.7	3415.3	3618.1	3370.8
68°	1575.8	1615.0	1688.3	1804.1	1987.5	2225.2	2542.3	2952.3	3427.8	3646.8	3380.0
70°	1208.3	1222.4	1292.7	1396.7	1594.4	1827.6	2147.7	2615.1	3152.4	3377.9	3103.5
72.5°	574.1	582.6	628.0	730.6	856.3	1046.2	1328.7	1769.5	2253.7	2488.3	2214.5
75°	210.4	212.3	222.9	247.3	294.3	365.7	501.3	775.3	1147.9	1368.8	1152.4
77.5°	113.5	113.9	118.0	124.1	132.5	142.0	162.6	218.0	351.6	478.4	371.4
80°	71.3	71.0	75.2	80.0	85.8	90.4	92.3	98.8	111.3	130.3	119.7
82.5°	36.4	39.9	49.3	54.6	63.1	64.6	62.6	62.3	66.0	71.3	73.8
85°	20.1	17.8	26.2	34.9	38.0	39.0	39.4	37.2	36.4	35.8	37.5
87.5°	10.2	9.5	11.4	17.4	18.7	15.2	15.6	13.2	9.2	9.2	9.5
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	618.6	618.6	618.6	618.6	618.6	618.6	618.6	618.6
2.5°	614.0	614.4	613.6	613.6	613.6	614.0	613.6	613.3
5°	609.1	609.8	609.8	610.2	610.6	610.6	610.6	610.6
7.5°	601.9	602.3	603.0	603.0	603.0	603.0	603.0	603.0
10°	595.0	594.3	593.9	593.2	593.2	592.1	592.3	592.7
12.5°	591.7	590.0	589.3	588.2	587.4	586.4	586.4	586.7
15°	593.2	590.8	588.6	587.9	587.0	586.4	585.5	586.0
17.5°	596.1	593.5	590.8	589.3	587.9	586.7	586.4	586.7
20°	602.7	598.8	594.7	592.1	589.0	588.2	587.0	588.2
22.5°	611.3	606.7	601.4	596.6	593.2	591.7	590.0	591.3
25°	621.9	617.0	611.7	606.0	602.3	601.1	599.2	599.2
27.5°	636.8	632.6	628.0	622.7	618.9	617.9	614.8	614.8
30°	660.3	656.1	652.0	647.4	643.6	642.5	638.6	638.6
32.5°	691.4	686.9	684.2	680.5	677.4	675.5	670.9	670.6
35°	733.2	729.1	728.6	726.0	723.0	723.3	718.9	718.0
37.5°	793.3	789.8	791.0	788.7	786.0	788.4	785.7	785.7
40°	870.0	868.8	870.0	868.4	868.8	869.2	867.0	867.7
42.5°	962.7	959.6	966.3	965.7	964.5	967.6	962.3	958.4
45°	1069.3	1068.2	1075.0	1076.1	1073.8	1075.8	1066.3	1065.8
47.5°	1185.1	1185.1	1191.2	1190.4	1188.2	1188.5	1177.1	1170.0
50°	1305.9	1305.1	1311.2	1309.6	1306.7	1306.2	1294.5	1287.2
52.5°	1431.5	1431.5	1440.3	1436.1	1428.9	1425.5	1411.1	1401.5
55°	1570.5	1568.6	1571.2	1557.7	1543.6	1533.3	1515.5	1508.3
57.5°	1746.3	1724.3	1705.3	1687.8	1668.2	1655.9	1635.1	1627.5
60°	1995.9	1936.9	1911.6	1876.6	1844.0	1827.6	1799.8	1785.1
62.5°	2341.3	2243.7	2174.6	2097.6	2023.2	1970.7	1928.7	1909.9
65°	2740.9	2528.2	2352.4	2187.3	2047.1	1935.8	1874.0	1854.6
67.5°	2892.7	2502.4	2199.1	1962.0	1791.8	1659.3	1585.4	1569.8
68°	2860.5	2443.1	2127.9	1885.4	1714.4	1580.7	1507.1	1493.1
70°	2523.2	2061.2	1728.5	1487.1	1327.5	1200.3	1148.3	1125.8
72.5°	1720.2	1323.7	1015.4	812.2	693.0	612.5	564.7	548.3
75°	791.8	535.0	357.3	266.9	226.7	207.2	192.5	188.7
77.5°	230.9	167.9	144.3	133.7	125.8	118.8	113.9	113.5
80°	109.8	102.9	99.9	93.1	85.8	79.4	74.7	75.5
82.5°	73.8	71.8	71.8	64.9	53.5	46.0	38.0	34.1
85°	39.0	40.7	42.8	40.7	35.4	26.2	17.1	18.7
87.5°	13.2	15.2	15.9	15.6	14.1	10.6	7.9	7.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)