

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: P883066

Luminaire Tested: **NAV-SB3B-727-U-T2-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883066  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3B-727-U-T2-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

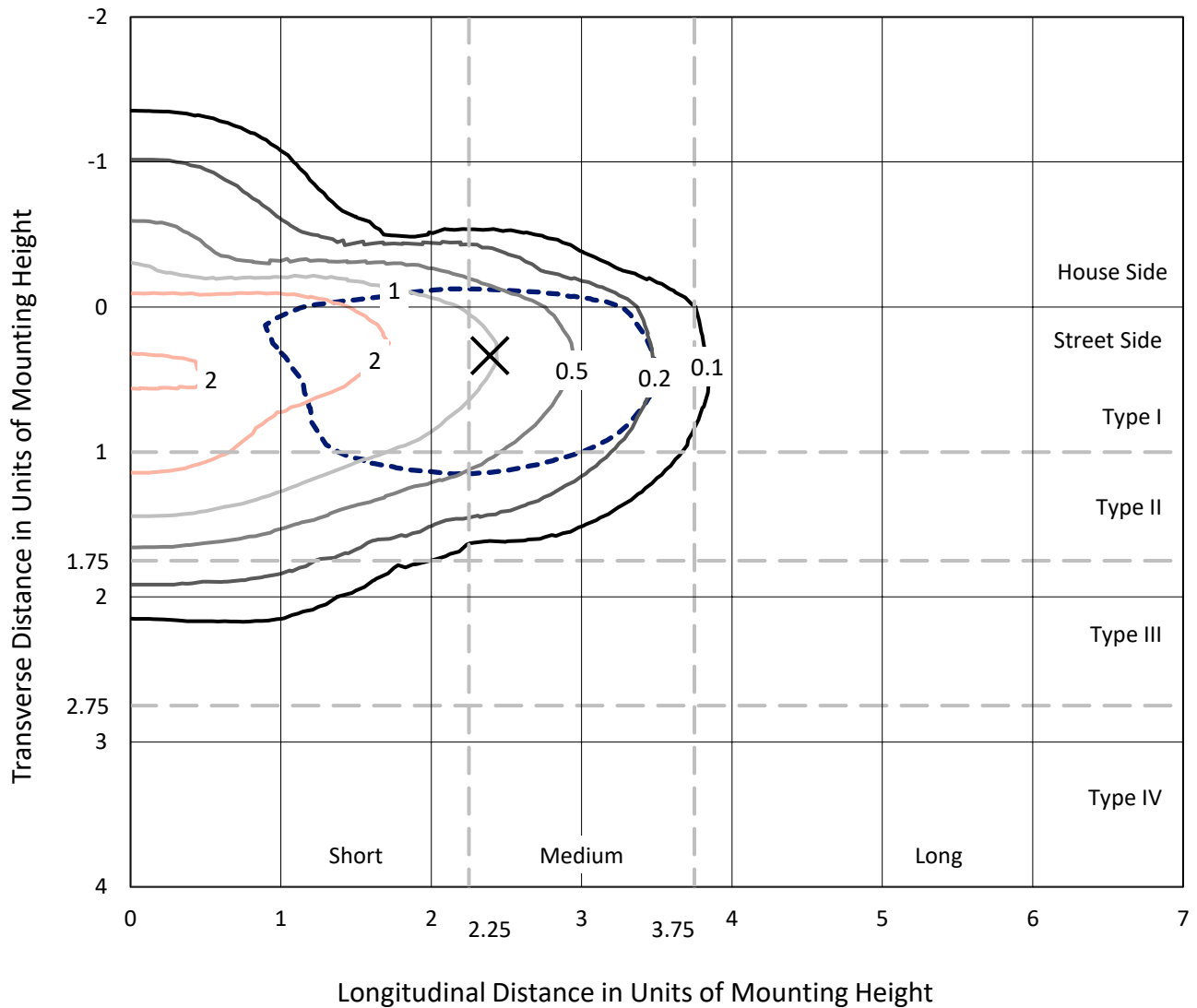
Lumens per Lamp: N/A  
Luminaire Lumens: 11177 lumens  
Efficiency: N/A  
Efficacy: 102.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 109.2  
Input Voltage (V): 120.0  
Input Current (Ain): 0.919  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 8.657  
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

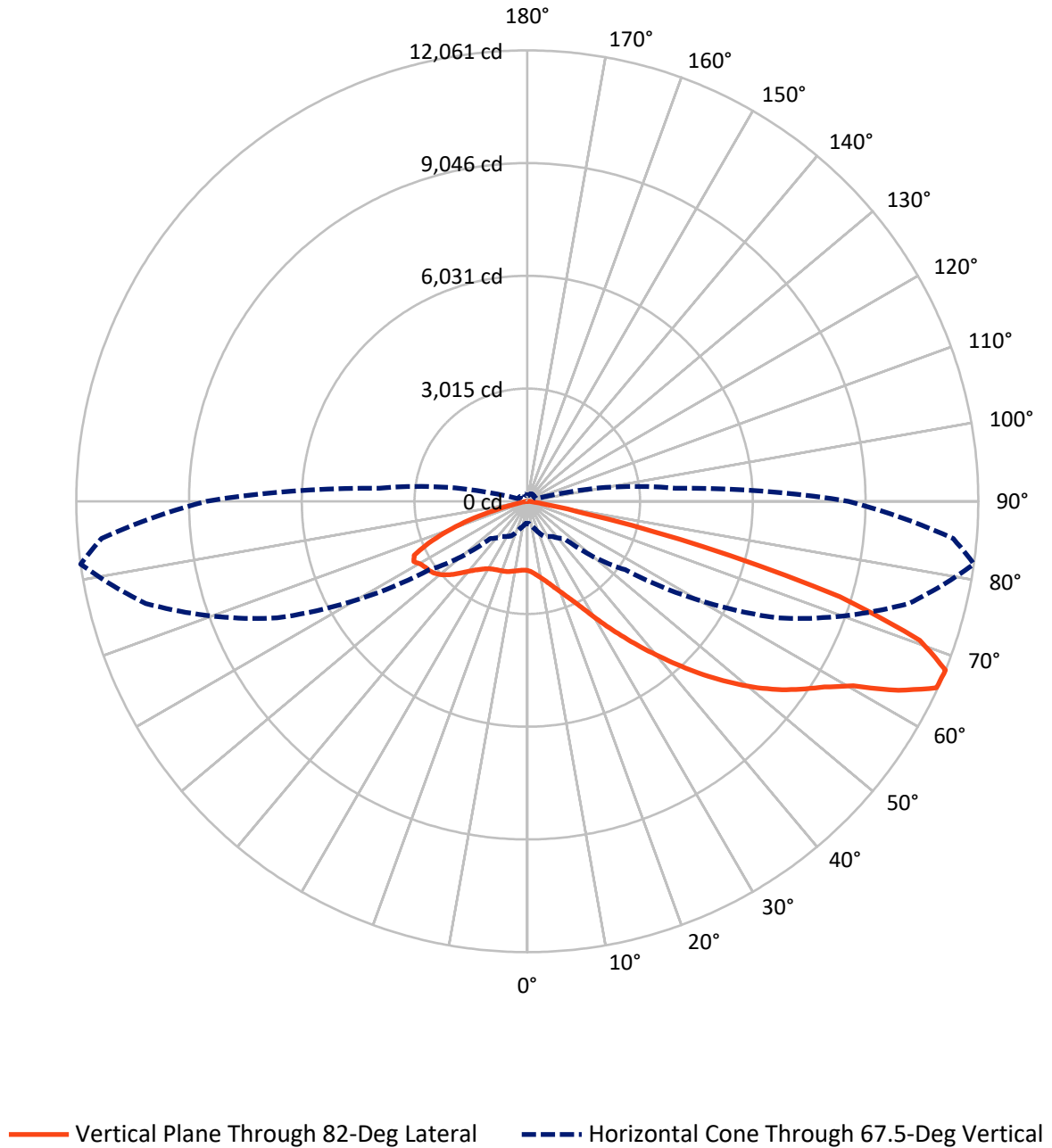
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2024.6	0.0	2024.6
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	9152.4	0.0	9152.4
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	11177.0	0.0	11177.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	165.0	1.5
10°-20°	428.7	3.8
20°-30°	686.6	6.1
30°-40°	1214.2	10.9
40°-50°	2127.3	19.0
50°-60°	2837.2	25.4
60°-70°	2641.3	23.6
70°-80°	1013.7	9.1
80°-90°	63.0	0.6
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°	11177.0	100.0
0°-180°	11177.0	100.0

**Coefficient of Utilization**



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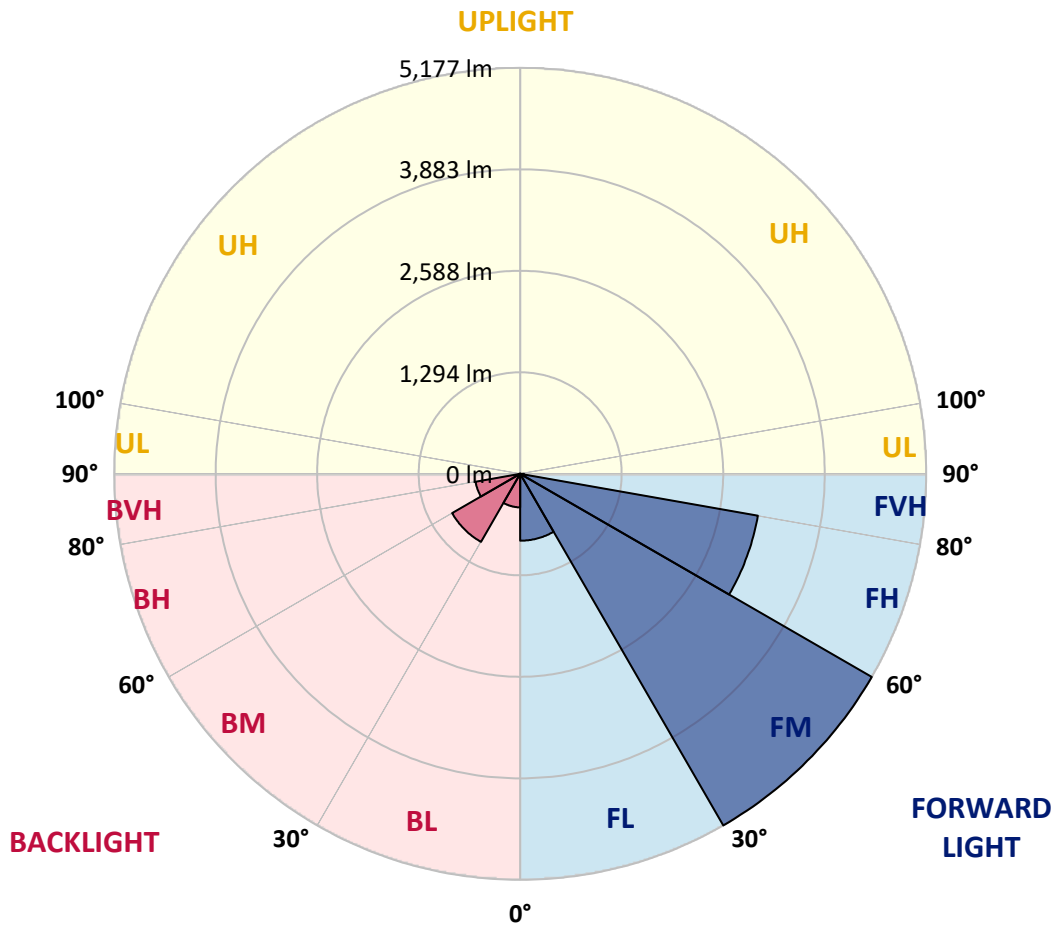
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	852.7	7.6			
FM (30°-60°)	5176.7	46.3			
FH (60°-80°)	3077.2	27.5			G2/5000
FVH (80°-90°)	45.8	0.4			G1/100
BL (0°-30°)	427.6	3.8	B1/500		
BM (30°-60°)	1002.0	9.0	B2/2500		
BH (60°-80°)	577.9	5.2	B2/1000		G2/1000
BVH (80°-90°)	17.2	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1851.7	1851.7	1851.7	1851.7	1851.7	1851.7	1851.7	1851.7	1851.7	1851.7	1851.7
2.5°	1957.1	1968.3	1961.9	1958.7	1953.0	1945.0	1938.6	1918.4	1897.5	1883.8	1879.0
5°	1996.5	2007.8	2007.0	2010.2	2014.2	2016.6	2015.0	1992.5	1962.7	1939.4	1925.7
7.5°	1962.7	1975.6	1986.0	2002.1	2030.3	2060.1	2074.6	2069.7	2039.1	2007.0	1990.1
10°	1866.9	1880.6	1905.6	1943.4	2002.9	2067.3	2121.2	2146.2	2126.9	2091.5	2068.1
12.5°	1691.5	1705.2	1754.3	1836.4	1936.1	2048.0	2151.0	2217.8	2222.6	2187.2	2159.9
15°	1494.4	1508.0	1560.3	1663.3	1815.4	1994.9	2167.1	2293.4	2336.1	2305.5	2272.5
17.5°	1372.0	1384.1	1423.5	1506.4	1665.0	1888.7	2161.5	2373.9	2471.3	2447.1	2407.7
20°	1335.0	1345.5	1364.0	1421.9	1553.9	1778.4	2124.4	2449.6	2616.9	2603.3	2559.0
22.5°	1374.5	1384.1	1389.7	1415.5	1498.4	1706.0	2077.8	2526.8	2785.9	2787.5	2733.6
25°	1465.4	1475.0	1468.6	1484.7	1520.9	1683.5	2060.1	2617.7	2998.4	3016.1	2954.9
27.5°	1615.1	1615.9	1600.6	1599.8	1605.4	1717.3	2078.6	2715.1	3266.3	3299.3	3223.7
30°	1915.2	1903.2	1844.4	1780.8	1751.9	1818.7	2130.1	2830.2	3582.6	3641.3	3546.4
32.5°	2377.9	2360.2	2252.4	2100.3	1947.4	1982.0	2222.6	2961.4	3927.0	4033.2	3917.4
35°	2880.1	2875.2	2762.6	2536.5	2269.3	2214.6	2373.1	3133.6	4302.8	4471.8	4334.2
37.5°	3346.8	3344.4	3280.0	3013.7	2688.6	2538.9	2614.5	3358.9	4705.2	4949.8	4787.3
40°	3773.3	3780.6	3716.2	3478.0	3150.5	2954.9	2942.8	3637.3	5152.6	5470.5	5277.3
42.5°	4141.9	4149.9	4084.7	3908.5	3606.7	3415.2	3346.0	3978.5	5589.6	6029.7	5801.2
45°	4392.1	4442.0	4432.4	4291.5	4075.1	3876.3	3830.4	4406.6	6087.7	6622.8	6354.8
47.5°	4463.0	4508.8	4581.2	4600.6	4468.6	4273.0	4327.8	4922.4	6591.4	7216.7	6911.7
50°	4288.3	4331.0	4481.5	4681.8	4773.6	4713.2	4811.4	5475.3	7107.2	7809.0	7458.1
52.5°	3943.9	3987.4	4177.3	4494.3	4868.5	5058.4	5296.6	6020.1	7607.0	8369.8	7975.5
55°	3445.8	3491.7	3735.5	4094.4	4687.5	5200.9	5701.4	6564.1	8064.9	8874.4	8442.3
57.5°	2768.2	2802.0	3055.5	3557.6	4232.0	5059.2	6000.0	7157.9	8496.2	9370.1	8905.0
60°	1804.2	1833.9	2128.5	2688.6	3477.2	4586.1	6059.5	7820.2	9069.1	10014.7	9528.6
62.5°	1199.8	1219.9	1394.6	1805.8	2448.7	3677.6	5711.1	8348.9	9909.3	11136.5	10598.1
65°	823.2	843.3	1018.0	1304.4	1582.1	2432.7	4709.2	8278.9	10670.5	12027.3	11390.7
67.5°	587.4	604.3	752.4	1022.8	1145.1	1413.1	3192.3	7384.1	10561.1	12061.1	11433.4
70°	420.9	430.5	552.8	796.7	910.1	849.0	1775.2	5647.5	9247.0	11137.3	10562.7
72.5°	294.5	297.7	383.8	606.8	733.1	619.6	845.0	3765.3	6993.8	8741.6	8188.8
75°	199.6	203.6	258.3	445.0	588.2	473.2	447.4	2019.0	4105.7	4838.8	4337.4
77.5°	122.3	123.9	166.6	304.2	440.2	360.5	288.1	855.4	1588.5	1559.5	1329.4
80°	69.2	69.2	106.2	189.1	300.2	232.6	202.0	363.7	502.9	441.8	389.5
82.5°	38.6	39.4	77.3	117.5	198.8	137.6	111.1	168.2	217.3	192.3	167.4
85°	16.1	17.7	47.5	55.5	95.0	68.4	45.1	70.8	80.5	71.6	52.3
87.5°	1.6	2.4	14.5	10.5	11.3	13.7	6.4	13.7	11.3	11.3	8.0
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1851.7	1851.7	1851.7	1851.7	1851.7	1851.7	1851.7	1851.7	1851.7	1851.7	1851.7
2.5°	1863.7	1851.7	1821.1	1785.7	1739.0	1716.5	1685.9	1665.0	1647.3	1648.9	1632.8
5°	1899.9	1869.4	1801.0	1715.7	1609.4	1533.8	1453.3	1397.8	1352.7	1343.1	1321.3
7.5°	1949.8	1901.5	1781.6	1627.9	1448.5	1312.5	1191.0	1112.9	1057.4	1039.7	1022.0
10°	2014.2	1944.2	1756.7	1517.7	1259.4	1086.4	956.0	894.8	857.0	844.1	834.5
12.5°	2089.0	1993.3	1723.7	1383.3	1064.6	898.1	815.2	784.6	772.5	768.5	766.1
15°	2183.2	2054.4	1673.8	1224.0	899.7	783.0	747.6	743.6	745.2	743.6	742.8
17.5°	2295.0	2121.2	1592.5	1059.8	788.6	724.2	711.4	714.6	718.6	717.8	716.2
20°	2417.4	2187.2	1488.7	914.2	713.0	682.4	675.2	678.4	681.6	680.0	679.2
22.5°	2556.6	2258.0	1373.6	800.7	662.3	643.8	635.7	636.5	636.5	633.3	631.7
25°	2723.2	2336.1	1252.9	720.2	623.7	609.2	599.5	596.3	591.5	581.8	580.2
27.5°	2921.9	2419.0	1137.1	663.9	593.1	579.4	568.1	560.1	548.0	531.9	530.3
30°	3145.6	2519.6	1038.9	628.5	568.9	555.3	542.4	530.3	512.6	492.5	490.9
32.5°	3408.8	2627.4	967.3	605.1	547.2	532.7	517.4	502.9	483.6	463.5	464.3
35°	3722.6	2757.8	925.4	589.1	530.3	511.0	494.1	478.0	463.5	445.8	444.2
37.5°	4063.0	2896.2	912.5	581.0	519.0	489.3	470.0	458.7	457.1	446.6	445.8
40°	4435.6	3060.3	922.2	576.2	507.0	468.3	447.4	445.0	449.0	430.5	431.3
42.5°	4829.9	3255.1	938.3	570.5	490.1	447.4	427.3	427.3	424.1	398.3	398.3
45°	5256.4	3479.6	954.4	556.9	470.0	426.5	411.2	405.6	391.9	367.0	366.1
47.5°	5686.1	3708.1	966.5	531.9	445.8	408.8	395.1	382.2	362.1	339.6	338.8
50°	6094.1	3913.3	953.6	494.9	418.5	391.9	377.4	359.7	338.0	322.7	320.3
52.5°	6458.6	4091.2	898.9	451.4	389.5	374.2	361.3	342.8	325.1	309.0	307.4
55°	6775.7	4235.2	802.3	410.4	363.7	358.9	346.0	322.7	298.5	284.9	283.3
57.5°	7079.9	4344.7	681.6	376.6	340.4	342.0	322.7	301.8	279.2	264.8	263.1
60°	7484.7	4491.1	559.3	345.2	315.4	320.3	299.4	284.1	255.9	237.4	235.0
62.5°	8131.7	4718.9	444.2	306.6	286.5	288.1	279.2	260.7	226.9	205.2	203.6
65°	8645.1	4635.2	350.1	264.8	253.5	255.9	255.9	235.8	199.6	174.6	172.2
67.5°	8587.1	3968.9	279.2	223.7	222.1	223.7	229.3	212.4	177.0	156.9	153.7
70°	7910.4	3156.9	223.7	185.9	193.1	189.1	205.2	193.9	159.3	139.2	136.8
72.5°	6454.6	2274.1	170.6	153.7	148.1	154.5	185.1	174.6	132.8	110.2	107.8
75°	3771.7	1213.5	127.1	121.5	107.0	128.8	164.2	148.9	101.4	81.3	78.9
77.5°	1228.0	423.3	93.3	89.3	79.7	103.8	140.0	125.5	82.9	64.4	62.0
80°	329.1	127.9	63.6	58.7	51.5	77.3	111.1	99.8	59.5	41.8	41.0
82.5°	132.0	53.9	37.0	33.0	28.2	53.1	87.7	80.5	44.3	26.6	26.6
85°	42.6	17.7	13.7	10.5	12.9	33.0	52.3	54.7	31.4	13.7	10.5
87.5°	5.6	2.4	2.4	3.2	2.4	5.6	16.1	15.3	8.9	1.6	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)