

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: P883130

Luminaire Tested: **NAV-SB3B-827-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883130  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3B-827-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

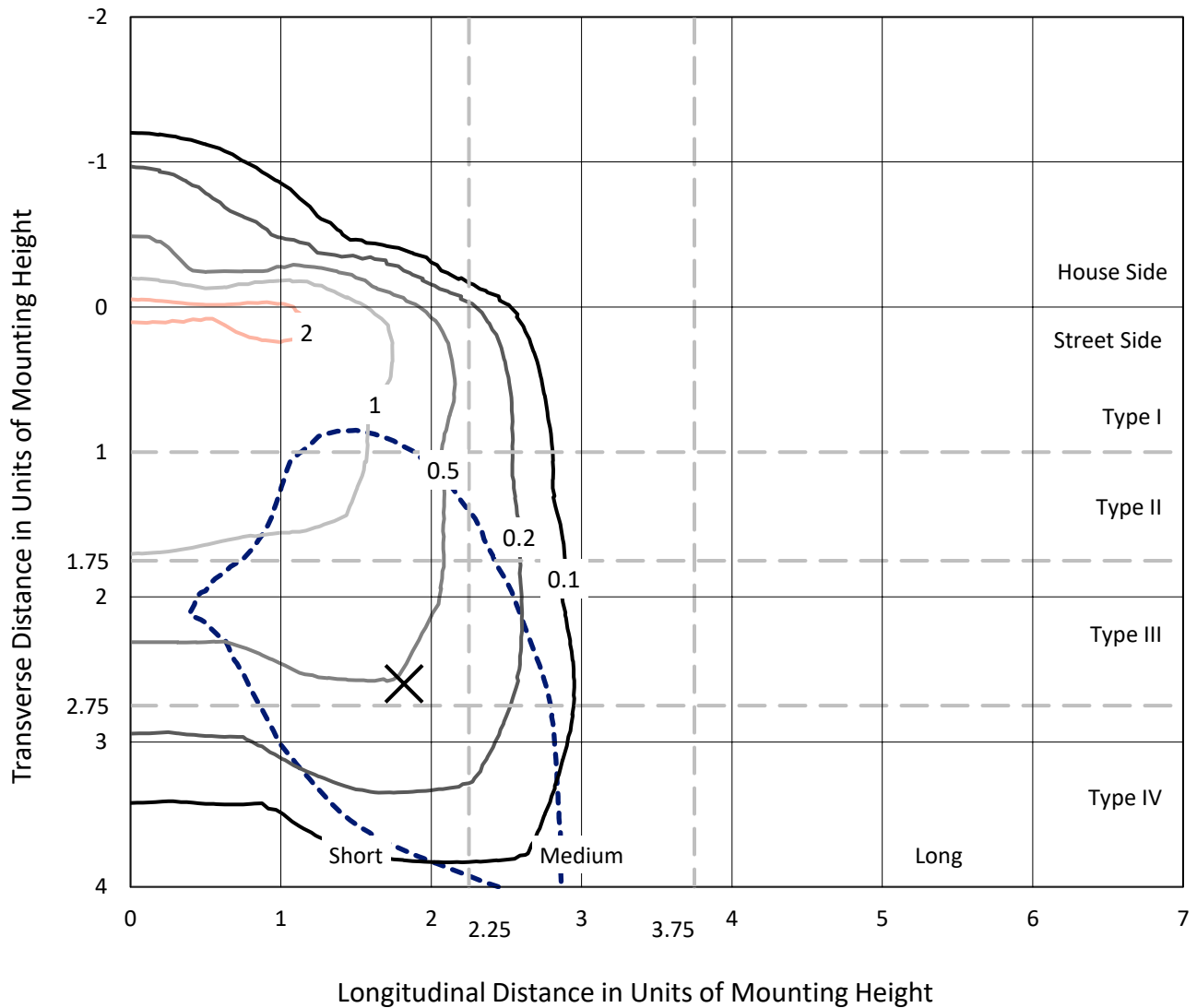
Lumens per Lamp: N/A  
Luminaire Lumens: 10390 lumens  
Efficiency: N/A  
Efficacy: 95.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 109.2  
Input Voltage (V): 120.0  
Input Current (Ain): 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

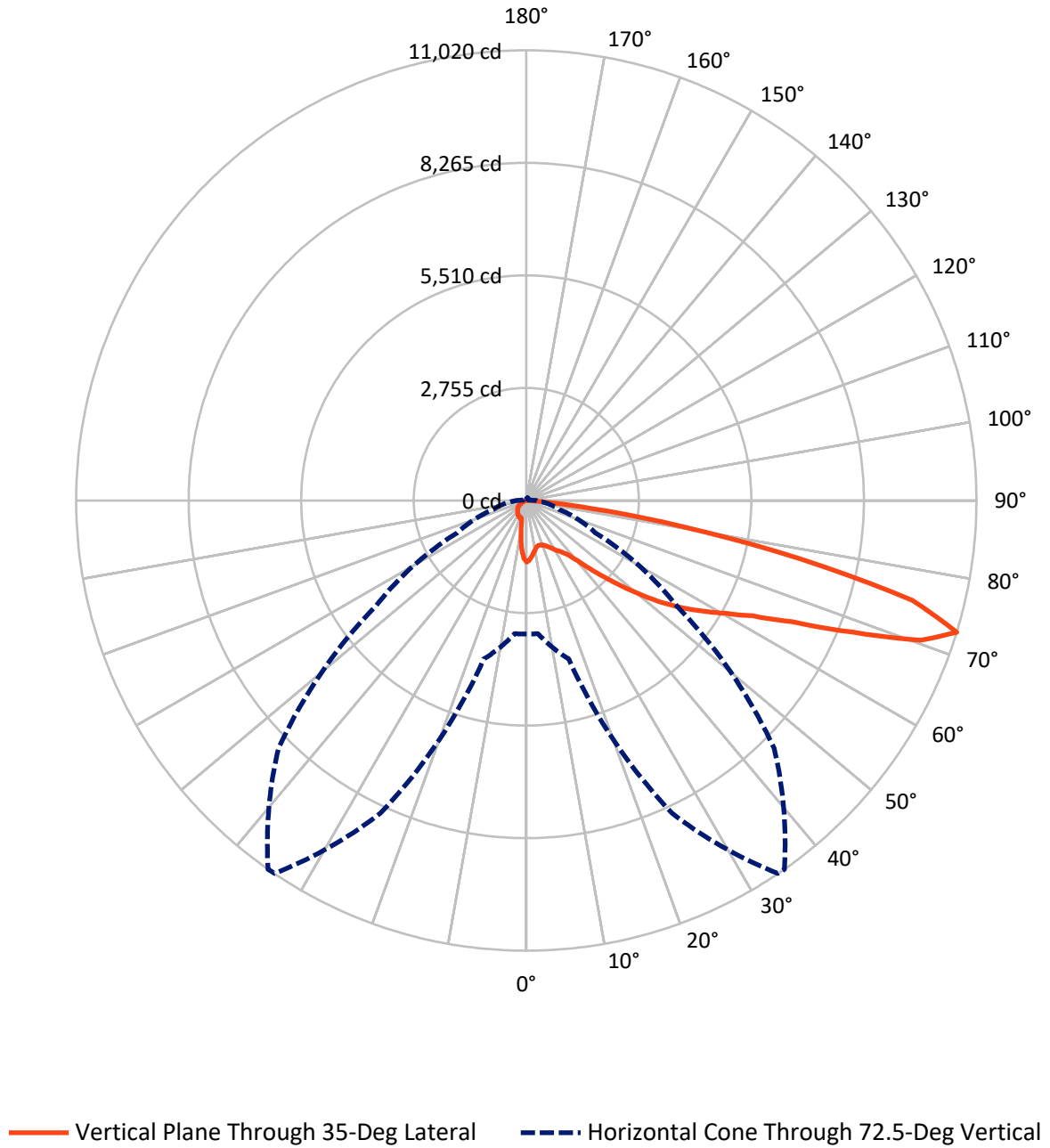
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1169.3	0.0	1169.3
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	9220.7	0.0	9220.7
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	10390.0	0.0	10390.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.7	1.2
10°-20°	289.5	2.8
20°-30°	470.3	4.5
30°-40°	784.6	7.6
40°-50°	1484.5	14.3
50°-60°	2358.9	22.7
60°-70°	2918.1	28.1
70°-80°	1813.9	17.5
80°-90°	146.6	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°	10390.0	100.0
0°-180°	10390.0	100.0

**Coefficient of Utilization**



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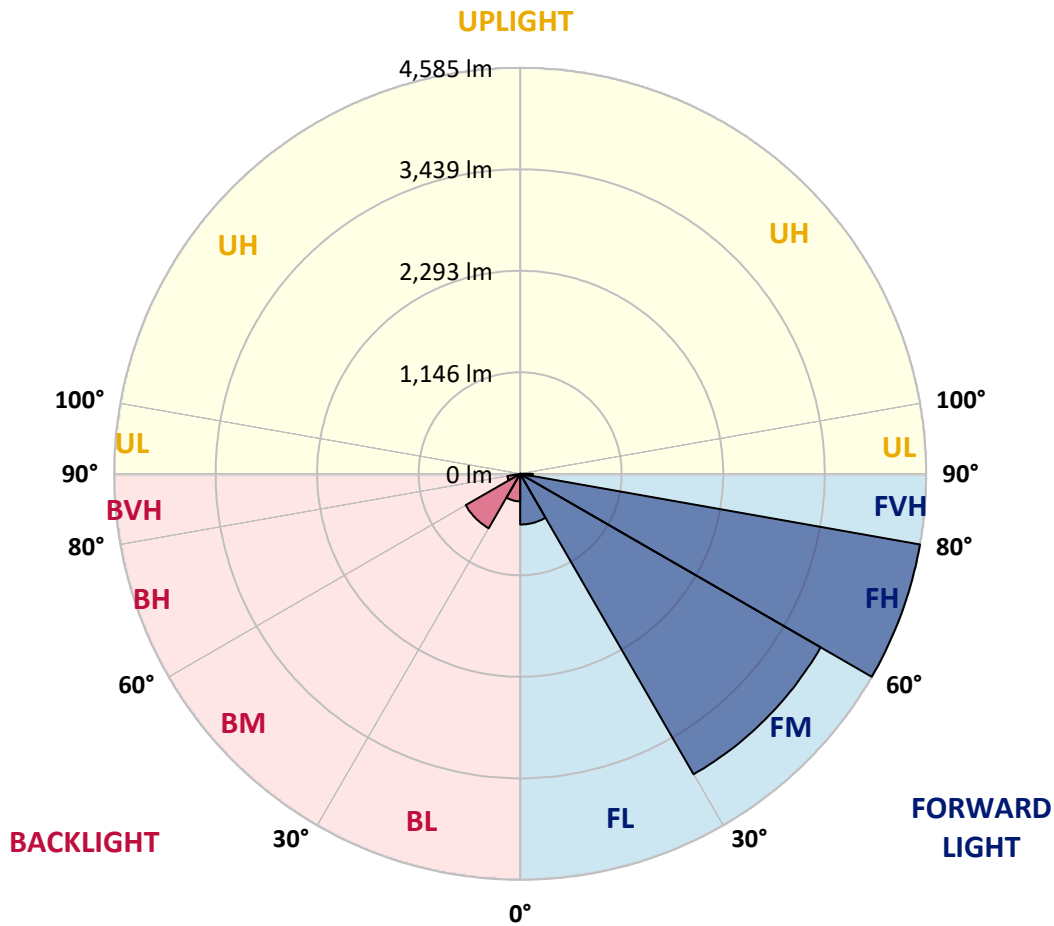
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	572.8	5.5			
FM (30°-60°)	3918.1	37.7			
FH (60°-80°)	4585.2	44.1			G2/5000
FVH (80°-90°)	144.6	1.4			G2/225
BL (0°-30°)	310.7	3.0	B1/500		
BM (30°-60°)	709.9	6.8	B1/1000		
BH (60°-80°)	146.7	1.4	B1/500		G1/500
BVH (80°-90°)	2.0	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-G2**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9
2.5°	1438.9	1451.0	1453.3	1457.1	1457.1	1461.7	1469.3	1480.0	1497.5	1506.6	1512.7
5°	1326.2	1335.3	1346.7	1355.9	1373.4	1375.7	1405.4	1434.3	1474.6	1505.1	1526.4
7.5°	1212.8	1223.4	1238.6	1260.7	1283.6	1290.4	1335.3	1384.1	1448.0	1505.1	1540.9
10°	1132.8	1133.6	1147.3	1169.4	1205.9	1214.3	1269.1	1338.4	1418.3	1496.0	1554.6
12.5°	1087.9	1093.2	1099.3	1116.1	1151.1	1156.4	1215.0	1296.5	1388.6	1490.6	1570.6
15°	1087.9	1091.7	1095.5	1103.9	1132.1	1136.6	1188.4	1269.9	1373.4	1492.9	1596.5
17.5°	1099.3	1105.4	1102.4	1112.3	1142.0	1145.0	1190.7	1262.2	1372.6	1507.4	1636.0
20°	1126.7	1131.3	1125.2	1131.3	1161.0	1167.1	1214.3	1276.7	1385.6	1532.5	1685.5
22.5°	1170.1	1172.4	1157.9	1162.5	1193.0	1200.6	1255.4	1317.8	1416.8	1572.9	1751.8
25°	1224.9	1229.5	1207.4	1212.8	1241.7	1250.8	1314.0	1379.5	1466.3	1628.4	1836.3
27.5°	1288.1	1290.4	1271.4	1270.6	1307.9	1320.9	1384.8	1455.6	1532.5	1698.5	1942.8
30°	1360.5	1367.3	1349.0	1346.0	1393.2	1403.8	1467.0	1549.3	1630.0	1803.5	2094.3
32.5°	1417.5	1422.9	1412.2	1419.8	1467.8	1476.2	1566.8	1681.7	1783.0	1952.7	2300.7
35°	1499.8	1502.8	1478.5	1492.2	1547.0	1568.3	1703.0	1867.5	1975.6	2140.0	2570.2
37.5°	1797.4	1797.4	1693.9	1626.1	1678.7	1697.7	1889.6	2101.2	2213.1	2391.3	2909.7
40°	2209.3	2202.5	2051.0	1912.4	1905.5	1942.8	2155.3	2395.8	2519.9	2692.7	3291.9
42.5°	2648.6	2637.9	2431.6	2294.6	2271.7	2284.7	2462.1	2759.0	2885.3	3060.4	3703.0
45°	3038.4	3035.3	2846.5	2662.3	2621.2	2662.3	2845.0	3183.8	3274.4	3458.6	4113.3
47.5°	3365.0	3365.0	3227.2	3106.9	3085.6	3109.9	3363.4	3655.0	3646.6	3882.7	4513.0
50°	3741.0	3738.0	3607.1	3555.3	3577.4	3611.6	3960.3	4151.4	4031.9	4299.1	4870.1
52.5°	4004.5	4022.7	3977.8	3969.4	4082.1	4141.5	4566.3	4637.1	4376.7	4694.2	5137.3
55°	4213.1	4234.4	4286.1	4344.8	4561.7	4639.4	5153.3	5097.7	4665.3	5036.8	5291.1
57.5°	4508.4	4478.0	4557.9	4673.6	5024.6	5118.2	5722.0	5532.4	4897.5	5314.7	5307.8
60°	4867.0	4871.6	4885.3	5031.5	5486.7	5607.0	6282.3	5943.5	5046.7	5485.2	5122.1
62.5°	5297.9	5304.8	5332.9	5557.5	6107.2	6220.6	6879.1	6280.0	5115.2	5437.2	4642.4
65°	5268.2	5297.2	5611.6	6379.7	7050.4	7162.3	7575.7	6516.0	5011.7	4998.7	3779.9
67.5°	4799.3	4846.5	5372.5	7361.8	8472.6	8597.4	8417.7	6562.4	4564.8	3887.2	2465.9
70°	4184.1	4200.9	4833.5	8244.9	10119.3	10245.6	9171.4	6051.6	3463.9	2168.2	1104.7
72.5°	3267.5	3271.3	4013.6	8449.7	11013.0	11019.9	8579.9	4492.5	1862.9	832.9	383.7
75°	2334.2	2311.3	2688.2	6852.5	9689.1	9766.8	6432.3	2107.3	711.8	393.6	191.1
77.5°	1251.6	1276.7	1521.1	4063.8	6693.4	6825.9	3509.6	607.5	362.4	268.0	126.4
80°	386.7	408.1	623.5	1860.6	3791.3	3871.2	1301.1	270.3	252.8	191.1	83.0
82.5°	121.8	126.4	290.8	781.9	1573.6	1610.2	376.8	153.0	172.8	126.4	48.7
85°	35.0	35.8	129.4	291.6	389.0	396.6	105.8	59.4	99.0	78.4	25.1
87.5°	3.8	12.2	48.7	48.7	34.3	33.5	11.4	12.9	28.2	9.9	4.6
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°	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9
2.5°	1508.9	1509.7	1499.8	1483.0	1464.7	1449.5	1430.5	1415.3	1404.6	1401.6	1406.9
5°	1519.6	1514.2	1486.1	1435.1	1374.2	1321.6	1263.0	1216.6	1186.1	1173.2	1177.7
7.5°	1535.6	1520.3	1458.7	1358.2	1241.7	1138.1	1033.1	951.6	899.9	874.0	877.8
10°	1549.3	1518.8	1413.0	1247.0	1068.9	912.0	770.4	672.2	617.4	591.5	592.3
12.5°	1562.2	1518.0	1353.6	1115.3	874.0	682.1	550.4	501.7	486.5	481.1	479.6
15°	1586.6	1520.3	1279.0	964.6	679.8	515.4	467.4	466.7	469.7	468.2	467.4
17.5°	1620.1	1522.6	1194.5	804.7	524.5	454.5	452.2	459.1	463.6	461.4	460.6
20°	1663.4	1531.7	1104.7	646.3	450.7	439.3	444.6	450.7	454.5	450.7	449.9
22.5°	1724.4	1547.7	1006.4	519.2	427.1	430.1	434.7	441.6	445.4	440.0	439.3
25°	1799.0	1572.9	909.8	451.5	415.7	419.5	426.3	433.9	438.5	433.2	432.4
27.5°	1895.6	1613.2	820.7	436.2	404.3	406.5	416.4	427.9	433.9	427.1	427.1
30°	2035.7	1679.4	743.8	443.1	397.4	392.1	405.8	421.8	428.6	422.5	421.8
32.5°	2221.5	1773.1	696.6	453.7	394.4	375.3	388.3	408.8	420.2	416.4	416.4
35°	2465.1	1915.4	678.3	465.9	392.1	357.8	366.9	389.0	408.8	412.6	412.6
37.5°	2760.5	2113.4	683.7	471.2	385.2	343.3	347.9	366.9	392.8	405.0	408.1
40°	3096.2	2344.1	714.1	465.9	377.6	331.2	331.9	346.4	369.2	387.5	393.6
42.5°	3442.6	2613.6	770.4	446.1	370.8	320.5	318.2	328.1	343.3	356.3	361.6
45°	3772.3	2890.7	826.0	418.7	362.4	309.9	304.5	308.3	311.4	316.7	319.7
47.5°	4060.0	3085.6	810.0	393.6	351.0	297.7	288.5	287.0	277.9	277.1	276.4
50°	4258.7	3128.2	719.4	368.5	334.2	284.0	269.5	260.4	244.4	236.8	237.5
52.5°	4321.9	2960.0	587.7	343.3	306.8	265.7	245.1	230.7	210.9	204.0	203.3
55°	4238.2	2630.3	469.7	312.9	268.7	241.3	218.5	199.5	183.5	175.1	175.1
57.5°	4033.4	2210.8	371.5	277.1	228.4	213.9	191.1	172.1	158.4	150.0	148.5
60°	3693.8	1755.6	293.9	234.5	194.9	184.2	160.6	148.5	136.3	126.4	124.1
62.5°	3178.4	1253.1	230.7	185.8	162.9	150.7	137.0	127.9	113.4	99.7	97.4
65°	2480.3	766.6	178.1	136.3	130.9	124.9	116.5	108.1	90.6	76.9	74.6
67.5°	1564.5	363.1	127.1	102.8	103.5	100.5	96.7	89.8	76.9	64.7	63.2
70°	689.0	175.9	83.7	78.4	76.9	76.9	79.9	77.7	65.5	54.1	51.8
72.5°	234.5	94.4	62.4	59.4	55.6	54.8	67.0	64.7	52.5	41.9	39.6
75°	122.6	63.2	45.7	42.6	33.5	40.3	53.3	50.2	37.3	27.4	25.1
77.5°	79.9	44.9	31.2	27.4	19.0	26.6	39.6	35.0	22.1	13.7	12.2
80°	50.2	29.7	18.3	12.9	9.1	14.5	21.3	15.2	8.4	3.0	2.3
82.5°	26.6	15.2	6.9	4.6	3.8	4.6	5.3	3.8	1.5	0.0	0.0
85°	10.7	5.3	2.3	1.5	0.8	0.0	1.5	0.8	0.0	0.0	0.0
87.5°	3.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	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)