

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: P882630

Luminaire Tested: **NAV-SB2C-830-U-T4FT-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882630
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-SB2C-830-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 615mA 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: 10112 lumens
Efficiency: N/A
Efficacy: 100.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

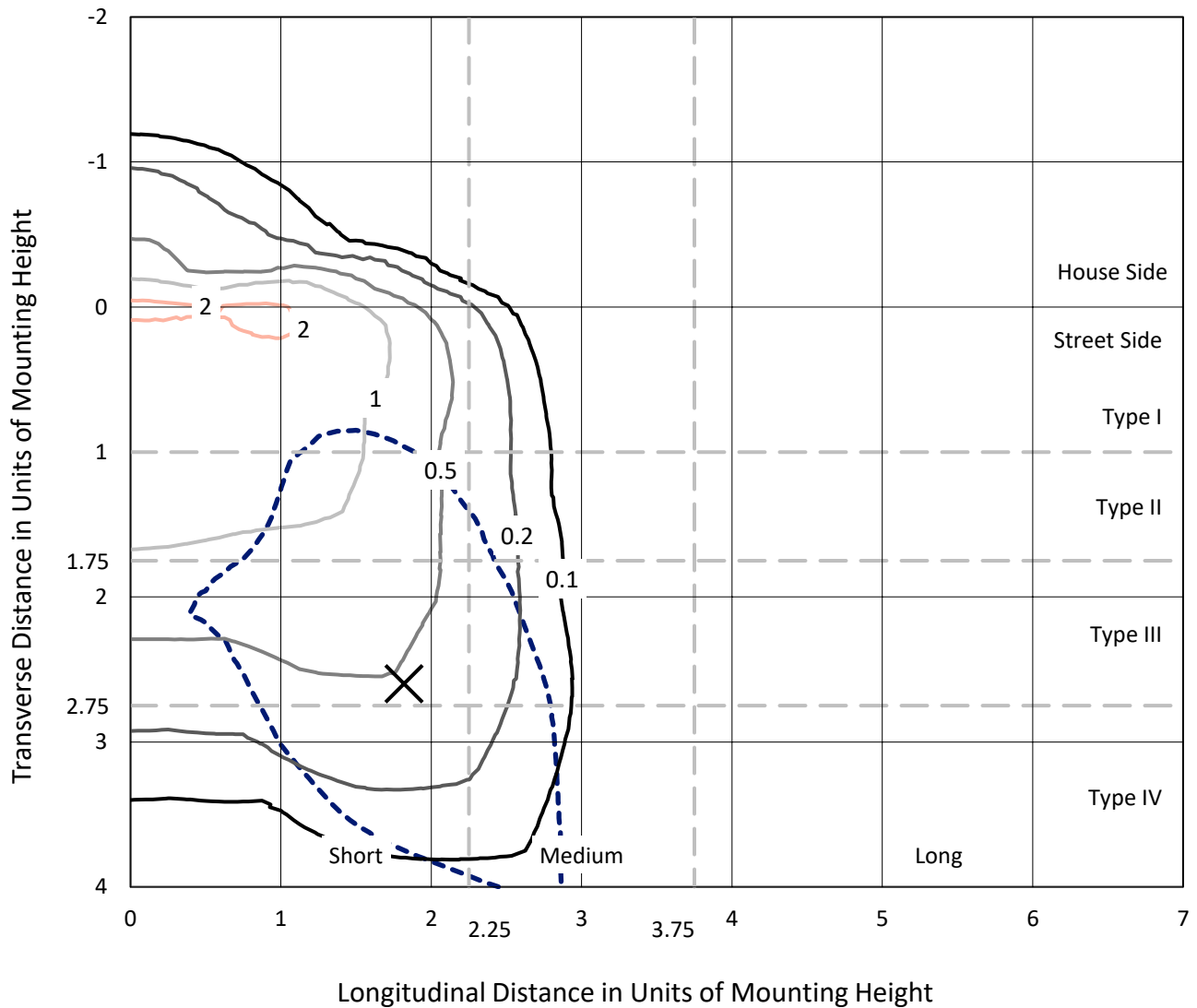
Input Watts (W): 100.9
Input Voltage (V): 120.0
Input Current (Ain): 0.857
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

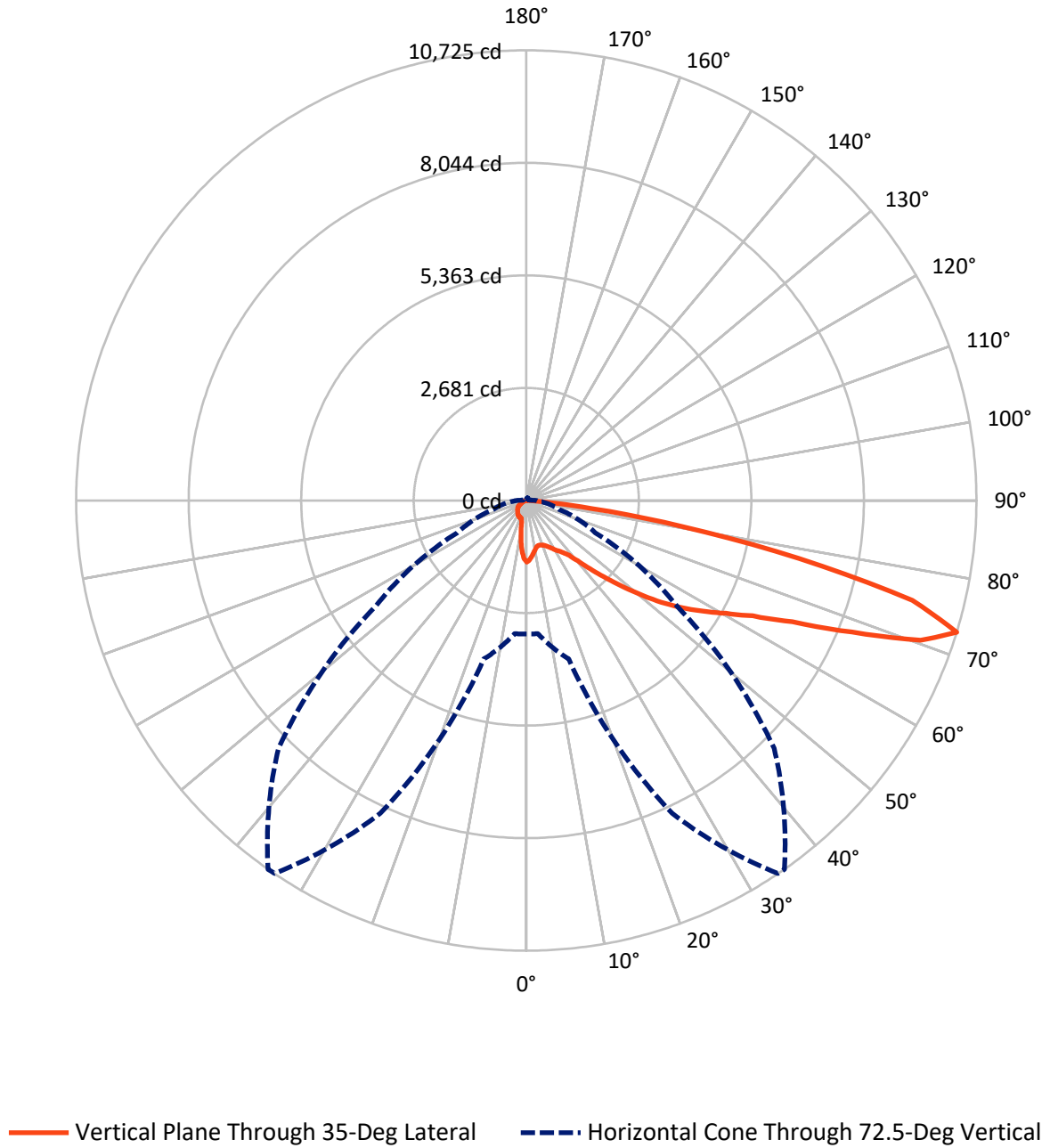
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1138.1	0.0	1138.1
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	8973.9	0.0	8973.9
	% Fixture	88.7	0.0	88.7
Total	Lumens	10112.0	0.0	10112.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.4	1.2
10°-20°	281.7	2.8
20°-30°	457.7	4.5
30°-40°	763.6	7.6
40°-50°	1444.8	14.3
50°-60°	2295.7	22.7
60°-70°	2840.0	28.1
70°-80°	1765.4	17.5
80°-90°	142.7	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°	10112.0	100.0
0°-180°	10112.0	100.0

Coefficient of Utilization



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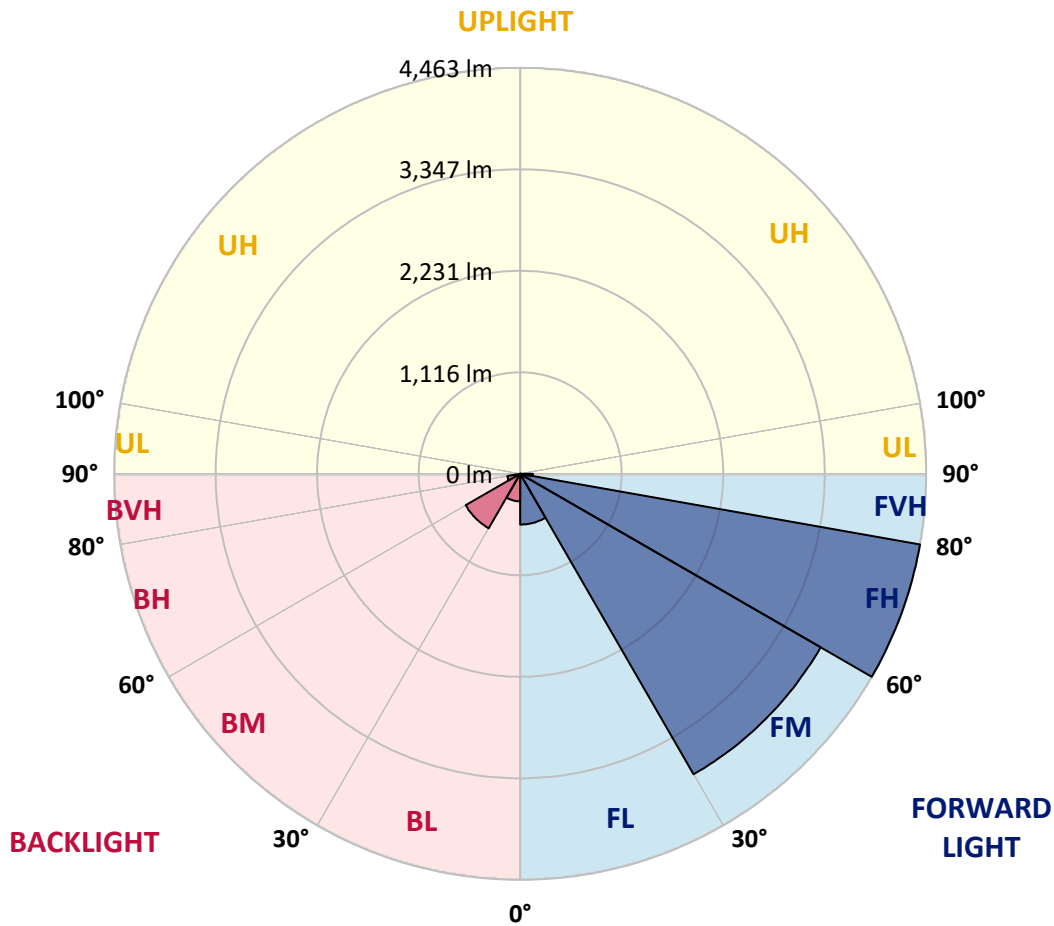
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	557.4	5.5			
FM (30°-60°)	3813.2	37.7			
FH (60°-80°)	4462.6	44.1			G2/5000
FVH (80°-90°)	140.7	1.4			G2/225
BL (0°-30°)	302.4	3.0	B1/500		
BM (30°-60°)	690.9	6.8	B1/1000		
BH (60°-80°)	142.8	1.4	B1/500		G1/500
BVH (80°-90°)	1.9	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°	1465.6	1465.6	1465.6	1465.6	1465.6	1465.6	1465.6	1465.6	1465.6	1465.6	1465.6
2.5°	1400.4	1412.2	1414.4	1418.1	1418.1	1422.6	1430.0	1440.4	1457.4	1466.3	1472.2
5°	1290.7	1299.6	1310.7	1319.6	1336.6	1338.9	1367.8	1395.9	1435.2	1464.8	1485.6
7.5°	1180.3	1190.7	1205.5	1227.0	1249.2	1255.9	1299.6	1347.0	1409.3	1464.8	1499.7
10°	1102.5	1103.3	1116.6	1138.1	1173.6	1181.8	1235.1	1302.6	1380.4	1455.9	1513.0
12.5°	1058.8	1064.0	1069.9	1086.2	1120.3	1125.5	1182.5	1261.8	1351.5	1450.7	1528.5
15°	1058.8	1062.5	1066.2	1074.4	1101.8	1106.2	1156.6	1235.9	1336.6	1453.0	1553.7
17.5°	1069.9	1075.8	1072.9	1082.5	1111.4	1114.4	1158.8	1228.5	1335.9	1467.0	1592.3
20°	1096.6	1101.0	1095.1	1101.0	1129.9	1135.9	1181.8	1242.5	1348.5	1491.5	1640.4
22.5°	1138.8	1141.0	1127.0	1131.4	1161.0	1168.5	1221.8	1282.6	1378.9	1530.8	1704.9
25°	1192.2	1196.6	1175.1	1180.3	1208.5	1217.4	1278.9	1342.6	1427.0	1584.9	1787.1
27.5°	1253.7	1255.9	1237.4	1236.6	1272.9	1285.5	1347.8	1416.7	1491.5	1653.0	1890.9
30°	1324.0	1330.7	1312.9	1310.0	1355.9	1366.3	1427.8	1507.8	1586.3	1755.3	2038.3
32.5°	1379.6	1384.8	1374.4	1381.8	1428.5	1436.7	1524.8	1636.7	1735.3	1900.5	2239.1
35°	1459.6	1462.6	1438.9	1452.2	1505.6	1526.3	1657.5	1817.5	1922.7	2082.8	2501.4
37.5°	1749.3	1749.3	1648.6	1582.6	1633.8	1652.3	1839.0	2045.0	2153.9	2327.3	2831.9
40°	2150.2	2143.5	1996.1	1861.2	1854.6	1890.9	2097.6	2331.7	2452.5	2620.7	3203.8
42.5°	2577.7	2567.3	2366.5	2233.2	2210.9	2223.5	2396.2	2685.1	2808.1	2978.6	3603.9
45°	2957.1	2954.1	2770.4	2591.0	2551.0	2591.0	2768.9	3098.6	3186.8	3366.1	4003.3
47.5°	3274.9	3274.9	3140.8	3023.8	3003.0	3026.7	3273.4	3557.2	3549.1	3778.8	4392.3
50°	3641.0	3638.0	3510.5	3460.2	3481.6	3515.0	3854.3	4040.3	3924.0	4184.1	4739.8
52.5°	3897.3	3915.1	3871.4	3863.2	3972.9	4030.7	4444.1	4513.0	4259.6	4568.6	4999.8
55°	4100.3	4121.1	4171.5	4228.5	4439.7	4515.3	5015.4	4961.3	4540.4	4902.0	5149.5
57.5°	4387.8	4358.2	4436.0	4548.6	4890.2	4981.3	5568.9	5384.4	4766.4	5172.5	5165.8
60°	4736.8	4741.2	4754.6	4896.8	5339.9	5457.0	6114.2	5784.5	4911.7	5338.4	4985.0
62.5°	5156.2	5162.8	5190.2	5408.8	5943.8	6054.2	6695.1	6112.0	4978.3	5291.8	4518.2
65°	5127.3	5155.4	5461.4	6209.0	6861.8	6970.7	7373.0	6341.7	4877.6	4865.0	3678.7
67.5°	4670.8	4716.8	5228.8	7164.8	8245.9	8367.4	8192.5	6386.9	4442.6	3783.2	2399.9
70°	4072.2	4088.5	4704.2	8024.3	9848.5	9971.5	8926.0	5889.7	3371.3	2110.2	1075.1
72.5°	3180.1	3183.8	3906.2	8223.6	10718.4	10725.0	8350.3	4372.3	1813.1	810.6	373.4
75°	2271.7	2249.5	2616.2	6669.1	9429.9	9505.4	6260.2	2050.9	692.8	383.1	186.0
77.5°	1218.1	1242.5	1480.4	3955.1	6514.3	6643.2	3415.7	591.3	352.7	260.8	123.0
80°	376.4	397.1	606.8	1810.8	3689.9	3767.7	1266.3	263.0	246.0	186.0	80.8
82.5°	118.5	123.0	283.0	760.9	1531.5	1567.1	366.8	148.9	168.2	123.0	47.4
85°	34.1	34.8	126.0	283.8	378.6	386.0	103.0	57.8	96.3	76.3	24.5
87.5°	3.7	11.9	47.4	47.4	33.3	32.6	11.1	12.6	27.4	9.6	4.4
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°	1465.6	1465.6	1465.6	1465.6	1465.6	1465.6	1465.6	1465.6	1465.6	1465.6	1465.6
2.5°	1468.5	1469.3	1459.6	1443.3	1425.6	1410.7	1392.2	1377.4	1367.0	1364.1	1369.2
5°	1478.9	1473.7	1446.3	1396.7	1337.4	1286.3	1229.2	1184.0	1154.4	1141.8	1146.2
7.5°	1494.5	1479.6	1419.6	1321.8	1208.5	1107.7	1005.4	926.2	875.8	850.6	854.3
10°	1507.8	1478.2	1375.2	1213.7	1040.3	887.6	749.8	654.2	600.9	575.7	576.4
12.5°	1520.4	1477.4	1317.4	1085.5	850.6	663.9	535.7	488.3	473.5	468.3	466.8
15°	1544.1	1479.6	1244.8	938.8	661.7	501.6	454.9	454.2	457.2	455.7	454.9
17.5°	1576.7	1481.9	1162.5	783.2	510.5	442.3	440.1	446.8	451.2	449.0	448.3
20°	1618.9	1490.8	1075.1	629.1	438.6	427.5	432.7	438.6	442.3	438.6	437.9
22.5°	1678.2	1506.3	979.5	505.3	415.7	418.6	423.1	429.7	433.4	428.3	427.5
25°	1750.8	1530.8	885.4	439.4	404.6	408.3	414.9	422.3	426.8	421.6	420.9
27.5°	1844.9	1570.0	798.7	424.6	393.4	395.7	405.3	416.4	422.3	415.7	415.7
30°	1981.3	1634.5	723.9	431.2	386.8	381.6	394.9	410.5	417.1	411.2	410.5
32.5°	2162.0	1725.6	678.0	441.6	383.8	365.3	377.9	397.9	409.0	405.3	405.3
35°	2399.1	1864.2	660.2	453.5	381.6	348.2	357.1	378.6	397.9	401.6	401.6
37.5°	2686.6	2056.8	665.4	458.6	374.9	334.2	338.6	357.1	382.3	394.2	397.1
40°	3013.4	2281.3	695.0	453.5	367.5	322.3	323.0	337.1	359.4	377.1	383.1
42.5°	3350.5	2543.6	749.8	434.2	360.8	311.9	309.7	319.3	334.2	346.8	351.9
45°	3671.3	2813.3	803.9	407.5	352.7	301.6	296.4	300.1	303.0	308.2	311.2
47.5°	3951.4	3003.0	788.4	383.1	341.6	289.7	280.8	279.3	270.4	269.7	269.0
50°	4144.8	3044.5	700.2	358.6	325.3	276.4	262.3	253.4	237.8	230.4	231.2
52.5°	4206.3	2880.8	572.0	334.2	298.6	258.6	238.6	224.5	205.2	198.6	197.8
55°	4124.8	2559.9	457.2	304.5	261.5	234.9	212.6	194.1	178.6	170.4	170.4
57.5°	3925.5	2151.7	361.6	269.7	222.3	208.2	186.0	167.5	154.1	146.0	144.5
60°	3595.0	1708.6	286.0	228.2	189.7	179.3	156.3	144.5	132.6	123.0	120.8
62.5°	3093.4	1219.6	224.5	180.8	158.6	146.7	133.4	124.5	110.4	97.1	94.8
65°	2414.0	746.1	173.4	132.6	127.4	121.5	113.4	105.2	88.2	74.8	72.6
67.5°	1522.6	353.4	123.7	100.0	100.8	97.8	94.1	87.4	74.8	63.0	61.5
70°	670.5	171.2	81.5	76.3	74.8	74.8	77.8	75.6	63.7	52.6	50.4
72.5°	228.2	91.9	60.8	57.8	54.1	53.3	65.2	63.0	51.1	40.8	38.5
75°	119.3	61.5	44.5	41.5	32.6	39.3	51.9	48.9	36.3	26.7	24.5
77.5°	77.8	43.7	30.4	26.7	18.5	25.9	38.5	34.1	21.5	13.3	11.9
80°	48.9	28.9	17.8	12.6	8.9	14.1	20.7	14.8	8.2	3.0	2.2
82.5°	25.9	14.8	6.7	4.4	3.7	4.4	5.2	3.7	1.5	0.0	0.0
85°	10.4	5.2	2.2	1.5	0.7	0.0	1.5	0.7	0.0	0.0	0.0
87.5°	3.7	0.7	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)