

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: P883070

Luminaire Tested: **NAV-SB3B-727-U-T4FT-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883070
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-727-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 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: 11589 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

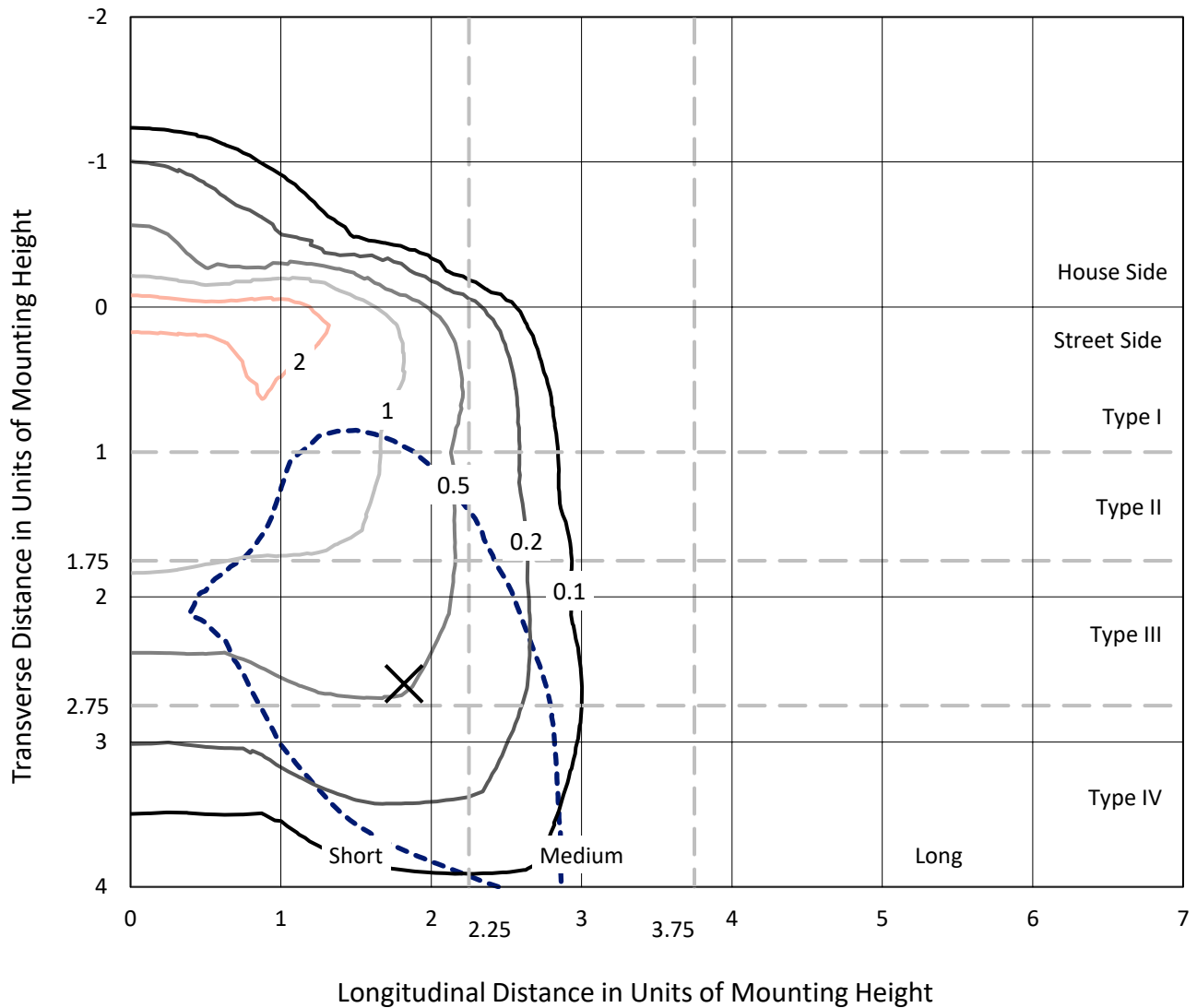
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

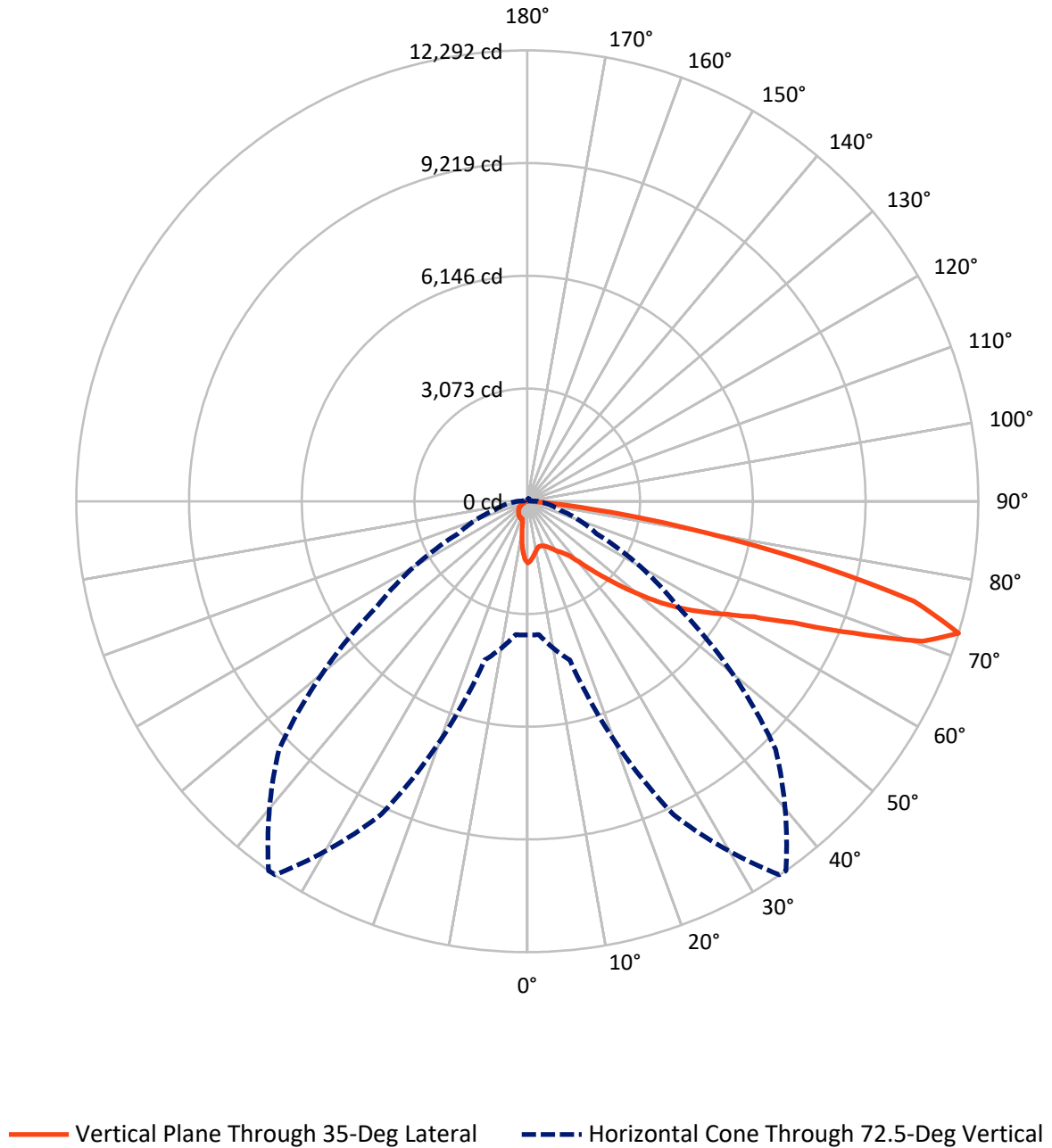
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 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	1304.3	0.0	1304.3
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	10284.7	0.0	10284.7
	% Fixture	88.7	0.0	88.7
Total	Lumens	11589.0	0.0	11589.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.0	1.2
10°-20°	322.9	2.8
20°-30°	524.5	4.5
30°-40°	875.2	7.6
40°-50°	1655.8	14.3
50°-60°	2631.1	22.7
60°-70°	3254.8	28.1
70°-80°	2023.2	17.5
80°-90°	163.5	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°	11589.0	100.0
0°-180°	11589.0	100.0

Coefficient of Utilization



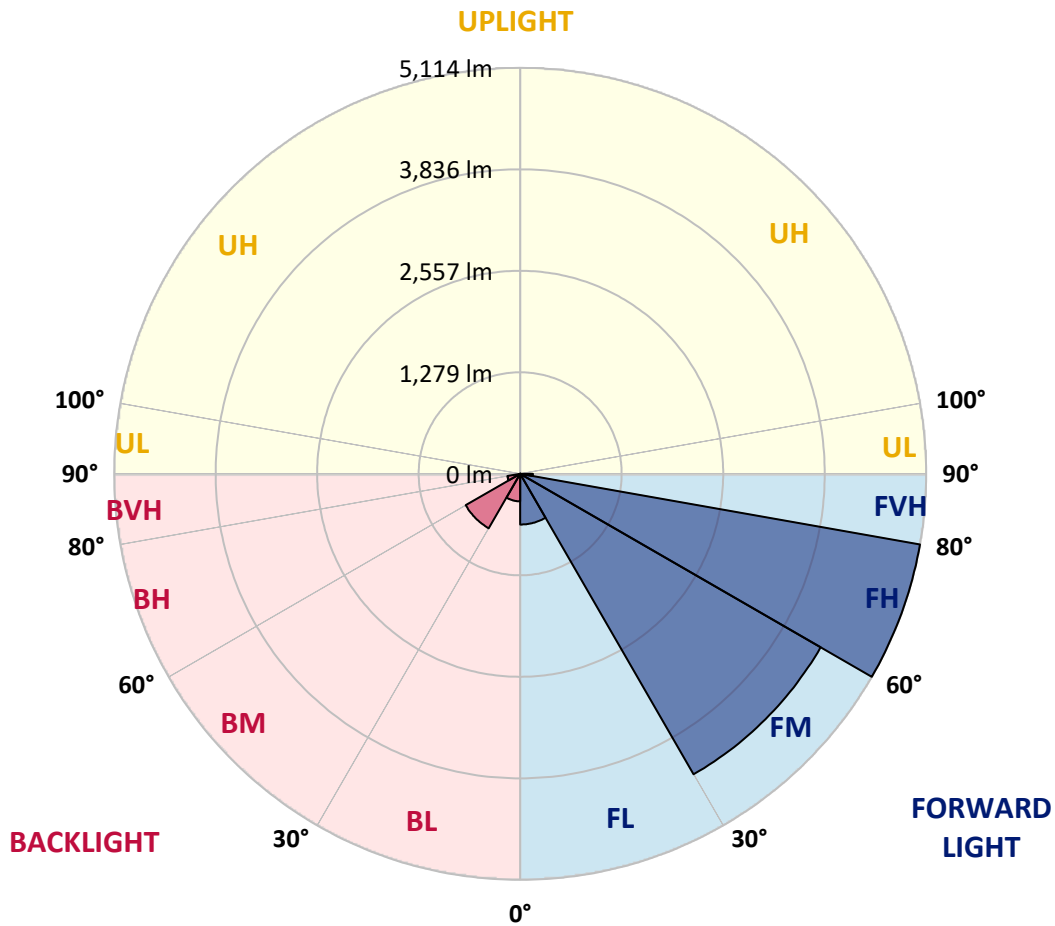
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	638.8	5.5			
FM (30°-60°)	4370.2	37.7			
FH (60°-80°)	5114.4	44.1			G3/7500
FVH (80°-90°)	161.3	1.4			G2/225
BL (0°-30°)	346.6	3.0	B1/500		
BM (30°-60°)	791.8	6.8	B1/1000		
BH (60°-80°)	163.7	1.4	B1/500		G1/500
BVH (80°-90°)	2.2	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-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	1679.6	1679.6	1679.6	1679.6	1679.6	1679.6	1679.6	1679.6	1679.6	1679.6	1679.6
2.5°	1604.9	1618.5	1621.0	1625.3	1625.3	1630.4	1638.9	1650.8	1670.3	1680.5	1687.3
5°	1479.2	1489.4	1502.2	1512.4	1531.9	1534.4	1567.5	1599.8	1644.8	1678.8	1702.6
7.5°	1352.7	1364.6	1381.6	1406.2	1431.7	1439.3	1489.4	1543.8	1615.1	1678.8	1718.7
10°	1263.5	1264.4	1279.7	1304.3	1345.1	1354.4	1415.5	1492.8	1582.0	1668.6	1734.0
12.5°	1213.4	1219.4	1226.2	1244.9	1283.9	1289.9	1355.3	1446.1	1548.9	1662.7	1751.8
15°	1213.4	1217.7	1221.9	1231.3	1262.7	1267.8	1325.5	1416.4	1531.9	1665.2	1780.7
17.5°	1226.2	1233.0	1229.6	1240.6	1273.7	1277.1	1328.1	1407.9	1531.0	1681.3	1824.8
20°	1256.8	1261.8	1255.1	1261.8	1295.0	1301.8	1354.4	1424.0	1545.5	1709.4	1880.0
22.5°	1305.2	1307.7	1291.6	1296.7	1330.6	1339.1	1400.3	1469.9	1580.3	1754.4	1953.9
25°	1366.3	1371.4	1346.8	1352.7	1385.0	1395.2	1465.6	1538.7	1635.5	1816.3	2048.2
27.5°	1436.8	1439.3	1418.1	1417.2	1458.9	1473.3	1544.6	1623.6	1709.4	1894.5	2167.1
30°	1517.4	1525.1	1504.7	1501.3	1554.0	1565.8	1636.3	1728.0	1818.0	2011.7	2336.0
32.5°	1581.1	1587.1	1575.2	1583.7	1637.2	1646.5	1747.6	1875.8	1988.7	2178.1	2566.2
35°	1672.8	1676.2	1649.1	1664.3	1725.5	1749.3	1899.6	2083.0	2203.6	2387.0	2866.8
37.5°	2004.9	2004.9	1889.4	1813.8	1872.4	1893.6	2107.6	2343.7	2468.5	2667.2	3245.5
40°	2464.3	2456.6	2287.6	2133.1	2125.4	2167.1	2404.0	2672.3	2810.7	3003.5	3671.8
42.5°	2954.2	2942.3	2712.2	2559.4	2533.9	2548.3	2746.2	3077.3	3218.3	3413.6	4130.3
45°	3389.0	3385.6	3175.0	2969.5	2923.7	2969.5	3173.3	3551.2	3652.2	3857.7	4588.0
47.5°	3753.3	3753.3	3599.6	3465.4	3441.6	3468.8	3751.6	4076.8	4067.5	4330.7	5033.8
50°	4172.8	4169.4	4023.3	3965.6	3990.2	4028.4	4417.3	4630.5	4497.1	4795.2	5432.1
52.5°	4466.6	4487.0	4436.9	4427.5	4553.2	4619.4	5093.3	5172.2	4881.8	5235.9	5730.1
55°	4699.2	4723.0	4780.8	4846.1	5088.2	5174.8	5748.0	5686.0	5203.6	5618.0	5901.6
57.5°	5028.7	4994.7	5083.9	5213.0	5604.4	5708.9	6382.3	6170.8	5462.6	5928.0	5920.3
60°	5428.7	5433.8	5449.0	5612.1	6119.9	6254.0	7007.3	6629.4	5629.1	6118.2	5713.1
62.5°	5909.3	5916.9	5948.4	6198.9	6811.9	6938.5	7673.0	7004.7	5705.5	6064.7	5178.2
65°	5876.2	5908.4	6259.1	7115.9	7864.1	7988.9	8450.0	7267.9	5590.0	5575.6	4216.1
67.5°	5353.1	5405.7	5992.5	8211.4	9450.3	9589.5	9389.1	7319.7	5091.6	4335.8	2750.4
70°	4667.0	4685.7	5391.3	9196.4	11287.0	11428.0	10229.8	6750.0	3863.7	2418.4	1232.1
72.5°	3644.6	3648.8	4476.8	9424.8	12283.9	12291.6	9570.0	5010.9	2077.9	929.0	428.0
75°	2603.5	2578.0	2998.4	7643.3	10807.2	10893.8	7174.5	2350.5	794.0	439.0	213.1
77.5°	1396.0	1424.0	1696.6	4532.8	7465.8	7613.6	3914.6	677.6	404.2	298.9	141.0
80°	431.4	455.1	695.5	2075.3	4228.8	4318.0	1451.2	301.5	281.9	213.1	92.6
82.5°	135.9	141.0	324.4	872.1	1755.2	1796.0	420.3	170.7	192.8	141.0	54.3
85°	39.1	39.9	144.4	325.2	433.9	442.4	118.0	66.2	110.4	87.5	28.0
87.5°	4.2	13.6	54.3	54.3	38.2	37.4	12.7	14.4	31.4	11.0	5.1
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°	1679.6	1679.6	1679.6	1679.6	1679.6	1679.6	1679.6	1679.6	1679.6	1679.6	1679.6
2.5°	1683.0	1683.9	1672.8	1654.2	1633.8	1616.8	1595.6	1578.6	1566.7	1563.3	1569.2
5°	1694.9	1689.0	1657.6	1600.7	1532.7	1474.1	1408.8	1357.0	1323.0	1308.6	1313.6
7.5°	1712.8	1695.8	1627.0	1514.9	1385.0	1269.5	1152.3	1061.4	1003.7	974.8	979.1
10°	1728.0	1694.1	1576.0	1390.9	1192.2	1017.3	859.3	749.8	688.7	659.8	660.6
12.5°	1742.5	1693.2	1509.8	1244.0	974.8	760.8	613.9	559.6	542.6	536.7	535.0
15°	1769.6	1695.8	1426.6	1075.9	758.3	574.9	521.4	520.5	523.9	522.2	521.4
17.5°	1807.0	1698.3	1332.3	897.6	585.1	506.9	504.4	512.0	517.1	514.6	513.7
20°	1855.4	1708.5	1232.1	720.9	502.7	490.0	495.9	502.7	506.9	502.7	501.9
22.5°	1923.3	1726.3	1122.6	579.1	476.4	479.8	484.9	492.5	496.8	490.8	490.0
25°	2006.6	1754.4	1014.7	503.6	463.6	467.9	475.5	484.0	489.1	483.2	482.3
27.5°	2114.4	1799.4	915.4	486.6	450.9	453.5	464.5	477.2	484.0	476.4	476.4
30°	2270.6	1873.2	829.6	494.2	443.3	437.3	452.6	470.4	478.1	471.3	470.4
32.5°	2477.8	1977.7	777.0	506.1	439.9	418.6	433.1	456.0	468.7	464.5	464.5
35°	2749.6	2136.5	756.6	519.7	437.3	399.1	409.3	433.9	456.0	460.2	460.2
37.5°	3079.0	2357.3	762.5	525.6	429.7	383.0	388.1	409.3	438.2	451.8	455.1
40°	3453.5	2614.6	796.5	519.7	421.2	369.4	370.2	386.4	411.8	432.2	439.0
42.5°	3839.9	2915.2	859.3	497.6	413.5	357.5	354.9	366.0	383.0	397.4	403.4
45°	4207.6	3224.3	921.3	467.0	404.2	345.6	339.7	343.9	347.3	353.2	356.6
47.5°	4528.6	3441.6	903.5	439.0	391.5	332.0	321.8	320.1	309.9	309.1	308.2
50°	4750.2	3489.2	802.5	411.0	372.8	316.7	300.6	290.4	272.6	264.1	264.9
52.5°	4820.7	3301.5	655.6	383.0	342.2	296.4	273.4	257.3	235.2	227.6	226.7
55°	4727.3	2933.8	523.9	349.0	299.8	269.2	243.7	222.5	204.6	195.3	195.3
57.5°	4498.8	2466.0	414.4	309.1	254.7	238.6	213.1	191.9	176.6	167.3	165.6
60°	4120.1	1958.2	327.8	261.5	217.4	205.5	179.2	165.6	152.0	141.0	138.4
62.5°	3545.2	1397.7	257.3	207.2	181.7	168.1	152.8	142.7	126.5	111.2	108.7
65°	2766.6	855.1	198.7	152.0	146.1	139.3	129.9	120.6	101.0	85.8	83.2
67.5°	1745.0	405.0	141.8	114.6	115.5	112.1	107.8	100.2	85.8	72.2	70.5
70°	768.5	196.2	93.4	87.5	85.8	85.8	89.2	86.6	73.0	60.3	57.7
72.5°	261.5	105.3	69.6	66.2	62.0	61.1	74.7	72.2	58.6	46.7	44.2
75°	136.7	70.5	50.9	47.6	37.4	45.0	59.4	56.0	41.6	30.6	28.0
77.5°	89.2	50.1	34.8	30.6	21.2	29.7	44.2	39.1	24.6	15.3	13.6
80°	56.0	33.1	20.4	14.4	10.2	16.1	23.8	17.0	9.3	3.4	2.5
82.5°	29.7	17.0	7.6	5.1	4.2	5.1	5.9	4.2	1.7	0.0	0.0
85°	11.9	5.9	2.5	1.7	0.8	0.0	1.7	0.8	0.0	0.0	0.0
87.5°	4.2	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)