

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: P960788

Luminaire Tested: **NAV-SB1D-722-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960788
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-722-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2200K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6587.7 lumens
Efficiency: N/A
Efficacy: 82.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

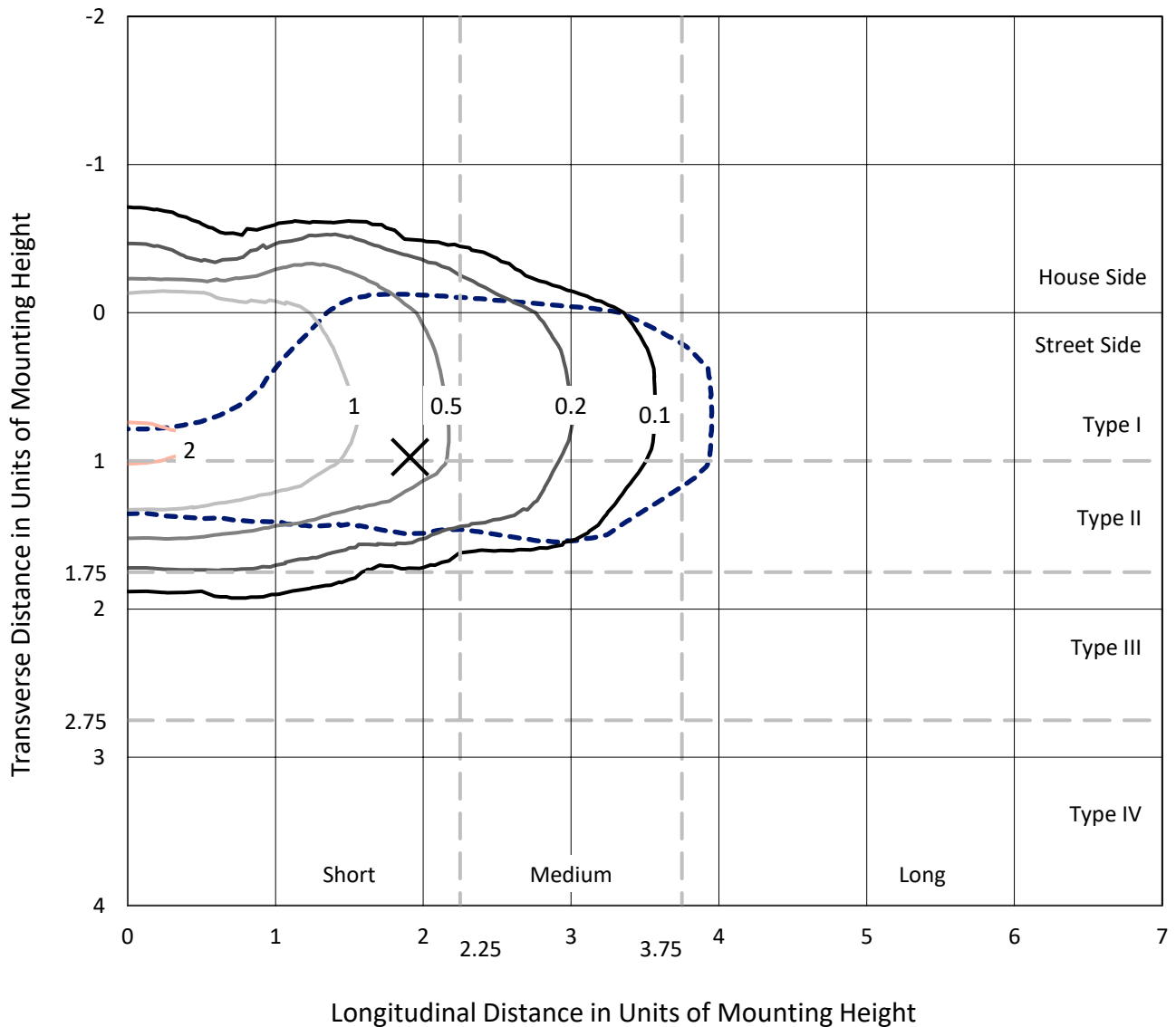
Input Watts (W): 79.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

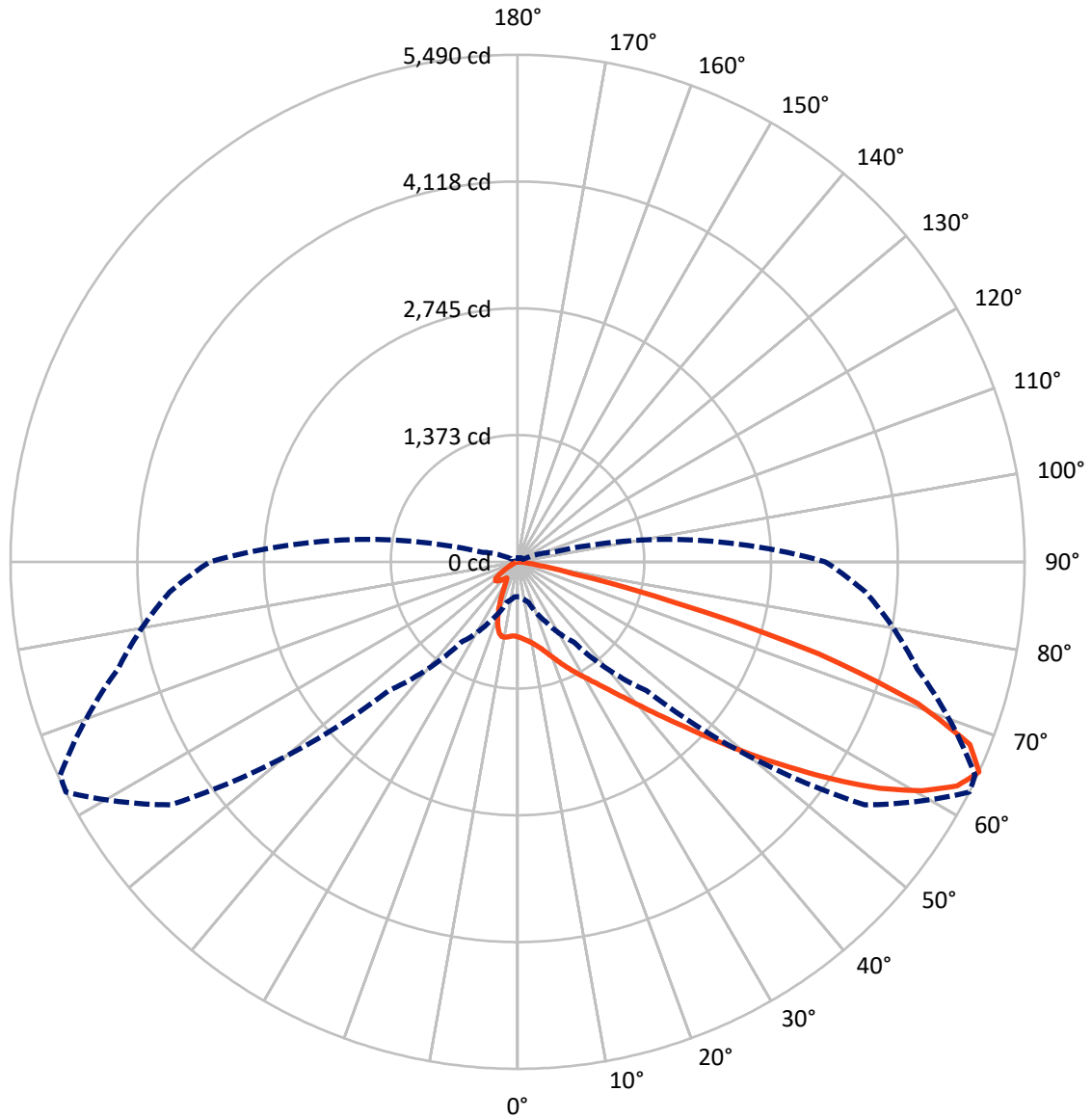
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	968.3	0.0	968.3
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	5619.3	0.0	5619.3
	% Fixture	85.3	0.0	85.3
Total	Lumens	6587.7	0.0	6587.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.6	1.2
10°-20°	212.6	3.2
20°-30°	370.1	5.6
30°-40°	667.1	10.1
40°-50°	1323.0	20.1
50°-60°	1802.2	27.4
60°-70°	1438.5	21.8
70°-80°	650.9	9.9
80°-90°	46.8	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°	6587.7	100.0
0°-180°	6587.7	100.0

Coefficient of Utilization



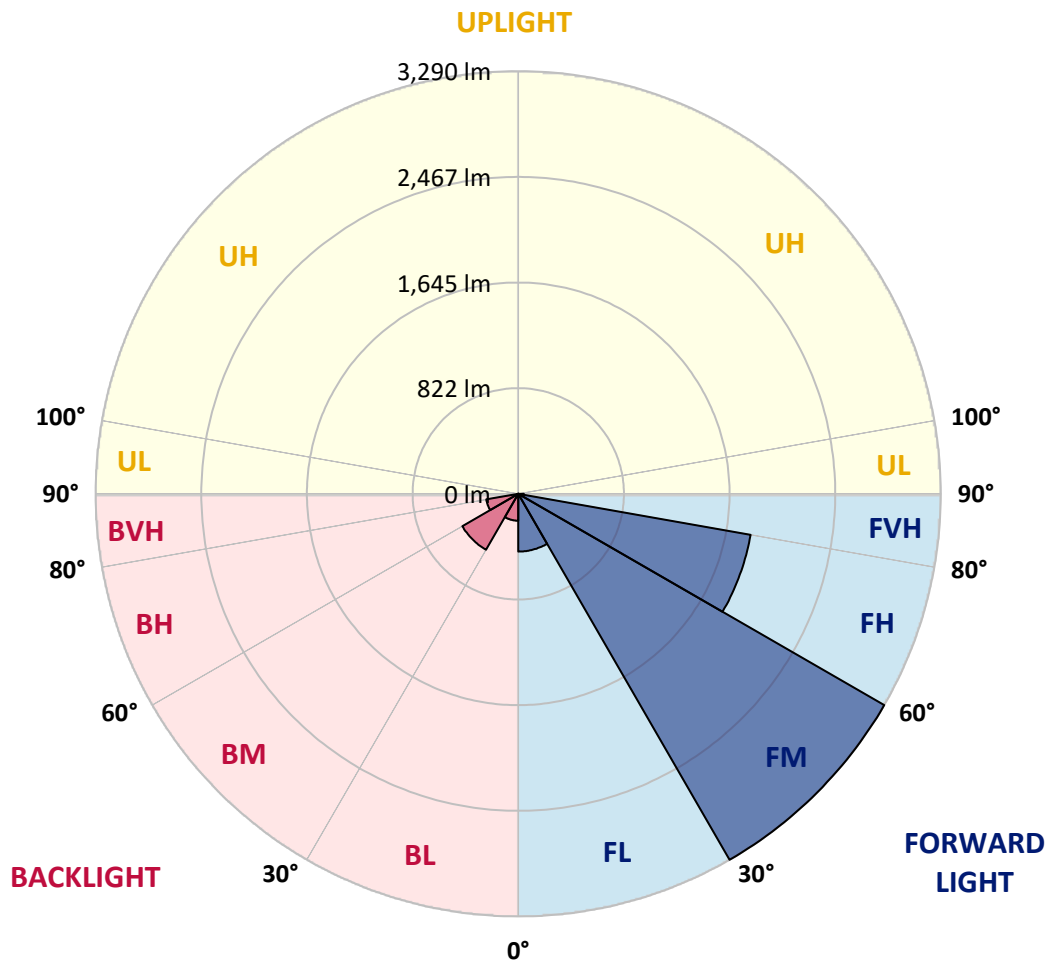
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	449.7	6.8			
FM (30°-60°)	3289.7	49.9			
FH (60°-80°)	1836.6	27.9			G2/5000
FVH (80°-90°)	43.3	0.7			G1/100
BL (0°-30°)	209.6	3.2	B1/500		
BM (30°-60°)	502.5	7.6	B1/1000		
BH (60°-80°)	252.8	3.8	B1/500		G1/500
BVH (80°-90°)	3.5	0.1			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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	813.0	813.0	813.0	813.0	813.0	813.0	813.0	813.0	813.0	813.0	813.0
2.5°	832.1	829.8	833.0	831.6	830.8	828.9	828.0	827.1	825.3	823.9	818.5
5°	834.4	833.0	836.2	838.9	841.6	844.3	845.6	847.5	845.6	842.0	836.6
7.5°	815.3	814.4	821.2	829.3	841.6	852.0	863.4	869.7	870.1	868.8	862.8
10°	814.0	811.7	818.5	828.4	844.3	862.8	882.8	896.5	898.2	904.2	897.8
12.5°	835.3	833.0	842.6	853.4	869.7	889.2	913.7	932.6	935.4	943.6	939.0
15°	871.0	867.9	878.7	892.8	913.7	935.8	961.7	978.9	981.2	991.2	983.0
17.5°	912.8	909.6	922.3	937.3	959.9	990.3	1020.2	1039.1	1041.9	1048.3	1033.3
20°	966.3	962.2	972.1	985.7	1009.7	1046.0	1081.8	1108.9	1108.5	1108.5	1084.0
22.5°	1028.3	1021.9	1030.5	1041.5	1064.2	1108.1	1155.7	1187.9	1187.9	1175.2	1134.8
25°	1094.9	1088.6	1098.1	1108.1	1128.0	1177.8	1233.6	1273.5	1275.3	1253.6	1189.2
27.5°	1178.3	1170.1	1177.4	1189.2	1201.0	1251.7	1317.9	1364.2	1365.0	1331.5	1240.9
30°	1338.8	1315.7	1292.9	1280.3	1285.8	1336.1	1406.7	1458.0	1462.5	1416.2	1297.0
32.5°	1632.4	1627.9	1548.2	1443.9	1389.5	1426.7	1506.0	1567.6	1570.3	1511.0	1370.0
35°	2088.8	2083.4	1955.1	1756.6	1579.4	1548.2	1626.6	1699.6	1697.7	1630.6	1464.7
37.5°	2633.5	2628.6	2459.5	2193.9	1907.1	1731.6	1782.0	1858.5	1869.9	1782.0	1587.1
40°	3099.0	3080.4	2973.4	2717.4	2342.1	2036.3	2003.2	2053.9	2065.7	1961.4	1742.6
42.5°	3451.6	3435.7	3381.4	3221.4	2868.8	2486.8	2263.7	2283.2	2296.4	2171.3	1921.2
45°	3634.2	3630.6	3652.4	3637.4	3405.4	3039.6	2636.3	2555.1	2560.1	2403.8	2123.7
47.5°	3660.1	3658.2	3757.4	3898.0	3866.7	3663.2	3114.4	2894.2	2876.5	2666.2	2344.0
50°	3507.8	3504.2	3694.5	3957.8	4174.9	4187.1	3657.3	3276.2	3237.3	2937.6	2573.8
52.5°	3021.5	3020.6	3333.3	3771.6	4283.2	4645.8	4193.9	3695.8	3630.6	3225.0	2816.6
55°	2324.9	2341.7	2700.2	3218.2	4085.6	4866.5	4675.6	4161.7	4061.6	3514.1	3040.6
57.5°	1647.0	1671.4	2025.8	2487.2	3472.9	4735.9	5001.5	4628.6	4520.7	3802.3	3267.6
60°	884.7	906.4	1261.3	1811.9	2583.7	4249.2	5173.3	5033.7	4931.8	4076.1	3472.4
62.5°	527.1	534.3	681.1	1169.7	1747.5	3246.3	5100.3	5342.3	5258.5	4305.8	3650.5
65°	378.4	379.8	453.7	714.2	1061.0	1972.3	4588.6	5490.1	5464.3	4478.9	3782.5
67.5°	318.6	317.6	348.5	474.5	722.8	988.0	3516.9	5281.1	5390.8	4588.6	3857.2
70°	273.3	274.6	310.9	347.6	543.4	559.2	1748.4	4598.2	4832.1	4617.6	3852.7
72.5°	203.5	208.0	241.6	316.8	410.1	384.8	603.6	3409.5	3832.3	4350.7	3652.8
75°	143.7	146.0	169.9	266.5	305.9	280.0	308.2	1762.5	2304.5	3335.6	2989.7
77.5°	110.6	114.7	128.7	186.2	301.3	196.7	188.5	610.0	937.3	2014.9	2049.8
80°	59.9	67.0	92.9	134.6	211.7	139.1	93.4	242.9	317.6	942.2	790.4
82.5°	30.9	34.4	64.8	97.0	120.5	121.5	46.2	101.1	131.0	291.0	108.3
85°	12.2	15.0	43.5	53.5	62.1	59.9	20.8	40.8	47.2	80.7	33.1
87.5°	2.8	4.5	15.9	12.2	11.8	12.7	5.0	9.5	9.0	9.5	5.8
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°	813.0	813.0	813.0	813.0	813.0	813.0	813.0	813.0	813.0	813.0	813.0
2.5°	818.1	816.2	811.2	805.8	799.4	795.8	793.6	793.1	790.0	787.7	790.0
5°	831.6	829.8	820.3	808.9	796.7	787.2	778.2	770.0	758.2	755.9	755.0
7.5°	858.8	853.8	838.4	823.0	799.9	772.2	738.7	700.2	665.7	655.3	650.4
10°	892.4	885.6	866.0	838.9	787.7	712.5	631.3	556.1	496.3	479.5	473.1
12.5°	930.4	924.6	898.7	848.4	736.5	600.0	475.9	382.5	324.5	310.0	305.9
15°	975.7	967.1	931.3	833.9	644.9	455.9	326.8	271.4	250.6	247.9	245.2
17.5°	1023.8	1009.7	960.3	781.8	521.6	324.0	252.5	236.6	227.6	224.8	223.4
20°	1067.7	1049.6	977.5	702.9	389.7	252.5	226.1	215.8	207.6	204.4	202.5
22.5°	1111.7	1085.9	977.5	595.5	292.3	223.9	207.6	198.0	188.5	184.5	182.1
25°	1157.4	1123.0	960.3	475.9	235.2	205.3	189.9	179.5	171.3	166.4	164.5
27.5°	1201.9	1154.4	920.9	362.5	209.4	189.0	173.5	163.6	155.9	152.3	152.3
30°	1244.0	1185.1	865.6	275.1	192.6	173.1	158.7	150.1	142.3	138.7	139.1
32.5°	1301.1	1224.1	806.7	225.7	178.1	158.2	145.0	136.8	130.1	127.3	127.3
35°	1380.5	1281.7	755.9	221.6	165.8	146.0	132.7	125.0	118.3	116.0	116.0
37.5°	1492.8	1374.5	729.2	248.8	155.9	135.1	122.8	114.7	108.3	106.5	106.1
40°	1631.5	1500.6	743.7	276.0	149.1	125.6	113.8	105.6	100.1	97.9	97.5
42.5°	1796.0	1656.0	823.9	296.8	144.5	117.4	105.2	96.0	92.5	91.5	91.5
45°	1985.0	1826.9	946.7	319.1	137.4	109.7	96.6	89.7	87.0	86.6	86.1
47.5°	2199.9	2014.4	1089.1	346.7	130.1	102.4	89.7	85.2	82.9	82.0	82.0
50°	2412.8	2203.4	1235.4	362.1	124.1	95.6	84.3	80.7	78.8	78.4	78.4
52.5°	2635.8	2397.9	1353.7	347.6	119.2	90.2	79.7	77.1	75.2	74.8	74.8
55°	2848.4	2555.1	1374.1	295.0	109.3	84.8	74.8	73.4	71.1	71.1	70.7
57.5°	3031.4	2634.0	1230.0	216.6	99.2	76.6	69.8	68.5	66.6	66.2	65.7
60°	3199.6	2611.4	949.5	146.0	88.4	68.5	63.4	62.5	60.7	58.4	58.0
62.5°	3294.4	2511.7	649.4	95.2	77.5	59.9	56.2	55.8	51.7	47.2	46.2
65°	3330.1	2306.8	405.2	69.3	64.8	51.2	48.5	47.6	41.7	36.7	36.3
67.5°	3298.9	1969.6	204.4	54.8	51.2	42.6	39.9	39.9	35.8	31.3	30.9
70°	3173.8	1476.5	86.1	44.0	39.5	32.6	32.6	34.4	30.3	25.4	24.9
72.5°	2902.3	993.4	45.8	33.5	29.4	23.1	26.8	28.1	24.0	19.1	19.1
75°	2307.3	606.0	31.8	24.9	18.6	16.3	20.4	21.3	16.3	12.7	12.2
77.5°	1578.1	348.1	21.3	15.9	11.8	9.5	14.0	13.1	8.6	5.8	6.4
80°	692.9	145.0	12.2	7.3	4.5	3.6	5.0	3.6	2.8	1.8	1.8
82.5°	81.1	34.0	4.5	2.8	1.8	0.9	0.4	0.0	0.0	0.0	0.0
85°	16.8	4.1	2.3	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.2	0.9	0.4	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)