

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: P959991

Luminaire Tested: **NAV-SB1B-830-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959991
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-830-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV WIDE OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

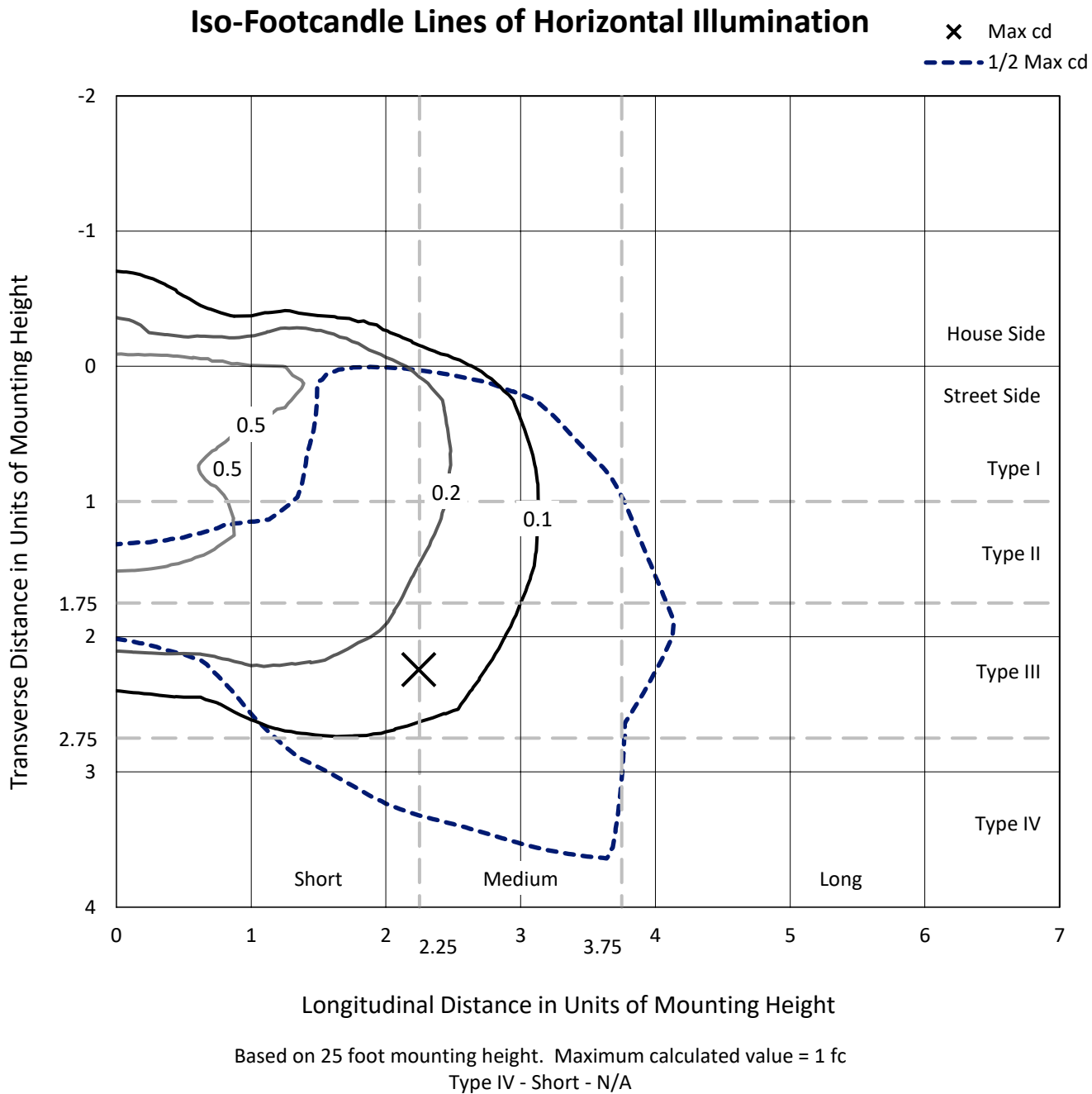
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3996.5 lumens
Efficiency: N/A
Efficacy: 100.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 39.8
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

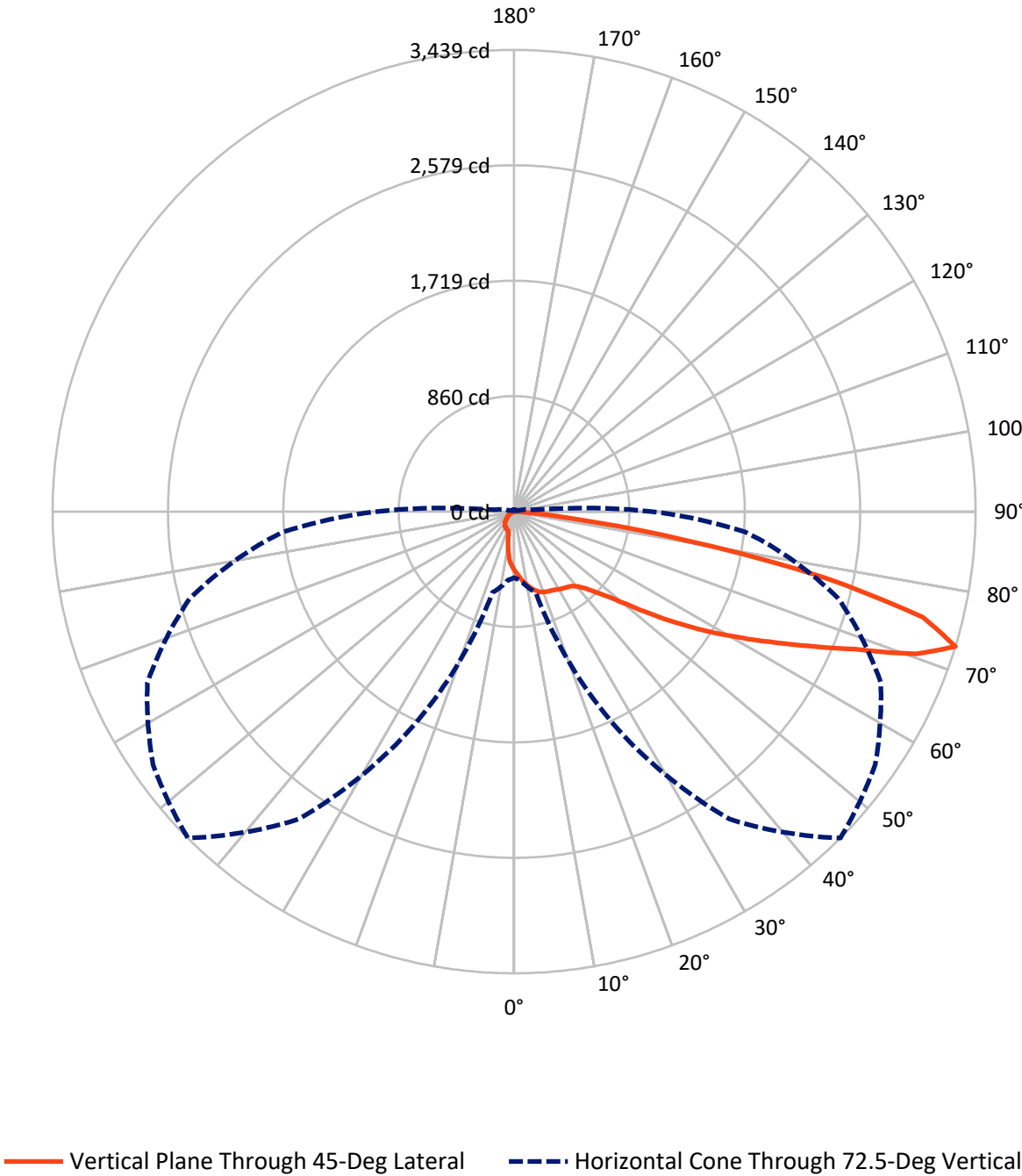


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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	419.9	0.0	419.9
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	3576.6	0.0	3576.6
	% Fixture	89.5	0.0	89.5
Total	Lumens	3996.5	0.0	3996.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.3	1.0
10°-20°	120.6	3.0
20°-30°	198.0	5.0
30°-40°	280.8	7.0
40°-50°	464.1	11.6
50°-60°	833.7	20.9
60°-70°	1157.7	29.0
70°-80°	839.7	21.0
80°-90°	60.7	1.5
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°	3996.5	100.0
0°-180°	3996.5	100.0

Coefficient of Utilization



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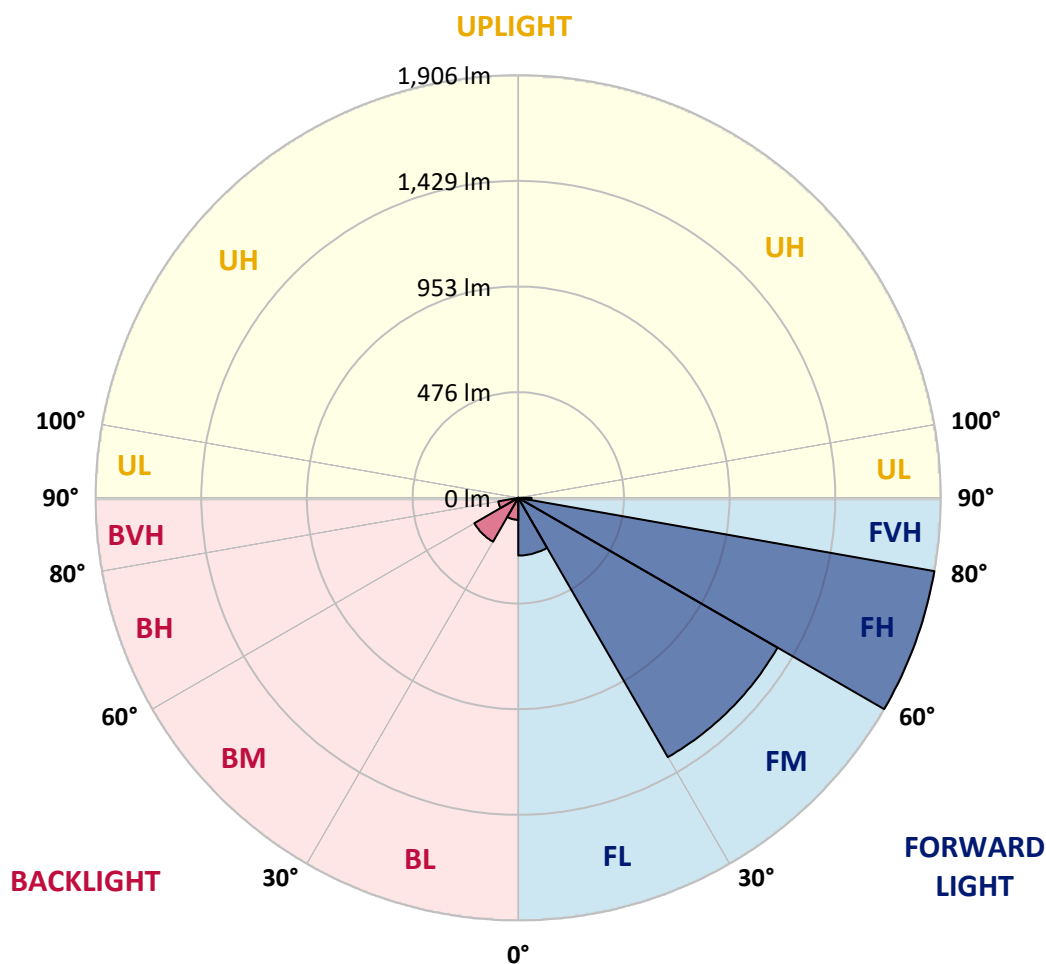
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	260.3	6.5			
FM	(30°-60°)	1350.2	33.8			
FH	(60°-80°)	1905.8	47.7			G2/5000
FVH	(80°-90°)	60.2	1.5			G1/100
BL	(0°-30°)	99.5	2.5	B0/110		
BM	(30°-60°)	228.4	5.7	B1/1000		
BH	(60°-80°)	91.6	2.3	B0/110		G0/110
BVH	(80°-90°)	0.5	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°	35°	45°	46°	55°	65°	75°	85°
0°	437.8	437.8	437.8	437.8	437.8	437.8	437.8	437.8	437.8	437.8	437.8
2.5°	478.2	479.0	478.5	475.2	469.8	466.8	465.1	459.6	456.1	449.9	443.3
5°	522.1	525.4	523.5	516.9	506.6	499.2	497.0	485.8	475.7	464.0	450.4
7.5°	568.8	570.4	566.8	558.4	544.5	532.0	530.0	514.4	498.4	480.4	461.9
10°	609.2	611.0	605.6	593.3	577.5	561.9	559.2	542.0	523.0	500.8	477.1
12.5°	643.0	644.8	637.8	623.0	605.6	589.5	586.8	568.8	547.8	523.2	493.7
15°	668.6	672.2	662.6	646.8	627.9	611.8	610.5	592.8	572.3	545.0	513.6
17.5°	683.6	687.2	678.1	659.1	643.0	629.3	627.7	612.9	593.9	567.6	533.0
20°	686.0	689.3	679.8	663.2	649.7	638.9	638.1	627.4	613.5	588.3	554.0
22.5°	678.7	682.8	674.0	660.7	651.4	645.6	644.6	638.6	630.7	609.4	573.7
25°	671.1	674.3	667.8	656.1	651.2	650.6	651.4	650.4	648.7	630.7	596.6
27.5°	670.6	674.0	666.7	655.5	652.8	658.5	659.3	664.5	665.8	650.1	618.7
30°	675.2	677.6	670.6	658.8	657.4	670.6	670.8	680.1	682.2	666.5	640.5
32.5°	685.2	688.0	680.9	663.7	661.7	680.1	680.9	693.1	696.7	683.9	663.4
35°	709.0	712.3	704.1	677.3	670.6	689.1	691.5	706.0	713.1	702.4	687.2
37.5°	768.1	758.6	747.4	704.9	690.4	703.3	707.4	724.3	736.8	724.5	715.6
40°	915.2	885.2	850.2	751.8	725.3	733.5	736.8	753.7	770.9	758.9	754.5
42.5°	1135.9	1100.4	1044.3	859.9	778.0	782.1	784.5	799.3	823.6	814.0	815.1
45°	1332.6	1319.8	1262.5	1044.3	876.5	856.3	859.3	866.9	902.6	899.1	906.2
47.5°	1483.7	1476.3	1432.1	1255.9	1042.8	947.1	955.6	959.1	1010.6	1023.3	1042.3
50°	1599.9	1597.2	1557.6	1444.1	1260.2	1081.1	1084.0	1076.5	1153.6	1184.7	1221.0
52.5°	1709.6	1718.8	1689.6	1619.0	1492.4	1256.4	1255.9	1219.9	1324.1	1371.0	1432.9
55°	1808.6	1811.9	1814.9	1797.4	1725.9	1456.1	1451.0	1392.1	1521.9	1570.4	1637.5
57.5°	1901.6	1902.9	1929.7	1965.4	1968.9	1670.5	1661.0	1590.4	1737.9	1772.5	1813.7
60°	1964.1	1970.4	2026.8	2126.1	2169.5	1891.7	1886.6	1814.6	1957.7	1973.8	1966.3
62.5°	1874.0	1912.2	2054.6	2251.6	2358.8	2137.0	2134.6	2066.9	2189.1	2176.0	2110.6
65°	1517.0	1581.6	1832.1	2336.4	2544.6	2410.9	2414.4	2342.4	2426.7	2384.1	2227.8
67.5°	1061.2	1129.3	1425.6	2343.3	2752.1	2732.5	2752.9	2640.0	2679.0	2583.5	2255.7
70°	733.8	769.0	961.9	2196.5	2913.9	3175.6	3174.9	3005.6	2930.0	2674.4	2113.9
72.5°	493.4	511.8	624.6	1742.6	2795.0	3438.8	3422.9	3284.9	3014.5	2501.2	1727.0
75°	208.2	221.5	289.2	979.3	2211.2	3146.0	3103.2	2903.0	2678.5	1969.5	1077.5
77.5°	66.0	71.8	114.0	350.5	1218.0	2364.8	2319.5	1812.9	1795.2	988.0	393.9
80°	31.4	36.6	64.1	140.7	479.3	1286.2	1279.9	822.5	772.2	266.8	79.1
82.5°	13.6	16.1	35.5	75.3	214.4	458.8	468.1	279.9	231.5	101.2	24.3
85°	4.4	5.7	16.4	34.6	90.6	114.0	112.6	66.5	93.3	55.1	8.5
87.5°	0.0	0.0	5.4	7.9	9.2	6.6	7.4	5.7	25.9	15.3	3.0
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°	437.8	437.8	437.8	437.8	437.8	437.8	437.8	437.8	437.8	437.8	437.8
2.5°	440.0	435.6	428.0	420.9	414.6	408.4	404.6	399.1	398.5	398.5	400.0
5°	443.0	435.9	422.3	407.8	391.1	375.4	359.6	344.3	339.4	335.8	337.4
7.5°	451.7	440.5	419.0	391.4	359.8	325.1	300.8	274.7	264.6	259.1	259.9
10°	464.3	449.1	416.3	368.0	316.7	269.5	234.8	206.5	195.6	191.0	191.0
12.5°	478.2	459.4	411.3	338.8	269.5	213.1	179.2	166.2	164.5	164.5	164.5
15°	494.9	471.9	402.9	304.4	220.2	168.6	156.6	157.1	158.8	159.9	159.9
17.5°	512.0	485.3	389.5	266.0	176.5	151.7	151.9	152.7	154.2	155.2	155.2
20°	530.5	498.7	371.8	225.1	151.4	146.8	147.6	148.4	149.4	150.1	150.3
22.5°	550.5	511.2	350.8	184.9	143.0	142.7	143.0	143.8	145.1	145.1	145.7
25°	571.7	525.1	326.8	155.8	138.6	138.6	139.1	139.7	140.7	140.7	141.0
27.5°	593.6	537.9	301.5	140.5	134.8	134.5	134.5	135.3	135.8	136.1	136.4
30°	617.6	553.0	276.0	137.2	131.7	130.4	129.6	130.1	130.7	130.9	131.5
32.5°	642.2	567.4	253.4	138.6	128.7	126.3	123.6	123.0	123.0	124.1	124.9
35°	669.4	583.2	236.0	143.2	127.1	120.3	115.9	113.5	113.8	115.4	116.2
37.5°	702.1	602.3	223.1	147.3	126.1	113.5	106.4	103.4	101.5	103.4	102.8
40°	745.0	630.4	213.8	150.6	124.6	105.6	96.0	91.1	87.5	88.7	88.1
42.5°	808.0	674.6	210.3	150.9	121.7	96.2	85.4	78.8	73.7	73.9	72.9
45°	896.4	744.5	228.6	147.3	115.1	86.2	74.2	65.5	62.2	61.4	60.3
47.5°	1017.5	846.1	270.9	139.9	105.6	76.4	63.2	56.0	53.5	52.1	51.2
50°	1179.8	976.8	317.8	131.7	96.0	67.1	54.3	49.6	48.0	46.6	46.3
52.5°	1368.1	1109.5	356.3	123.6	86.5	58.9	48.6	45.8	44.5	43.4	43.0
55°	1540.7	1200.8	354.0	114.8	77.2	52.4	44.5	42.8	41.2	40.1	39.6
57.5°	1648.2	1213.6	291.9	105.3	66.5	47.2	40.7	39.6	37.6	36.3	36.0
60°	1697.5	1140.5	204.6	92.8	56.0	42.3	36.6	36.0	33.5	31.7	31.1
62.5°	1706.5	1004.7	136.4	77.2	46.6	37.6	32.5	31.7	28.4	25.1	23.5
65°	1670.0	810.5	94.4	60.3	39.9	32.7	27.8	26.1	22.7	19.4	18.2
67.5°	1554.3	569.1	65.7	43.4	33.8	25.9	22.1	21.5	18.9	16.1	15.3
70°	1342.3	324.3	43.9	32.5	26.8	17.7	17.4	18.0	15.3	13.1	12.0
72.5°	1029.2	148.4	27.3	23.8	18.2	12.0	13.9	14.1	11.7	9.8	8.7
75°	605.9	63.6	17.2	15.3	9.2	7.9	10.0	10.4	7.9	6.3	5.4
77.5°	206.2	24.0	10.9	9.0	4.6	4.4	6.6	6.6	4.4	2.5	1.9
80°	46.9	9.0	5.4	3.6	2.2	1.9	2.2	1.9	1.1	0.3	0.0
82.5°	13.3	3.6	2.2	1.3	0.8	0.8	0.3	0.0	0.0	0.0	0.0
85°	3.8	1.6	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.6	0.3	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)