

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: P959898

Luminaire Tested: **NAV-SB1B-750-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959898
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-750-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 5000K, 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: 4704.8 lumens
Efficiency: N/A
Efficacy: 118.2 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



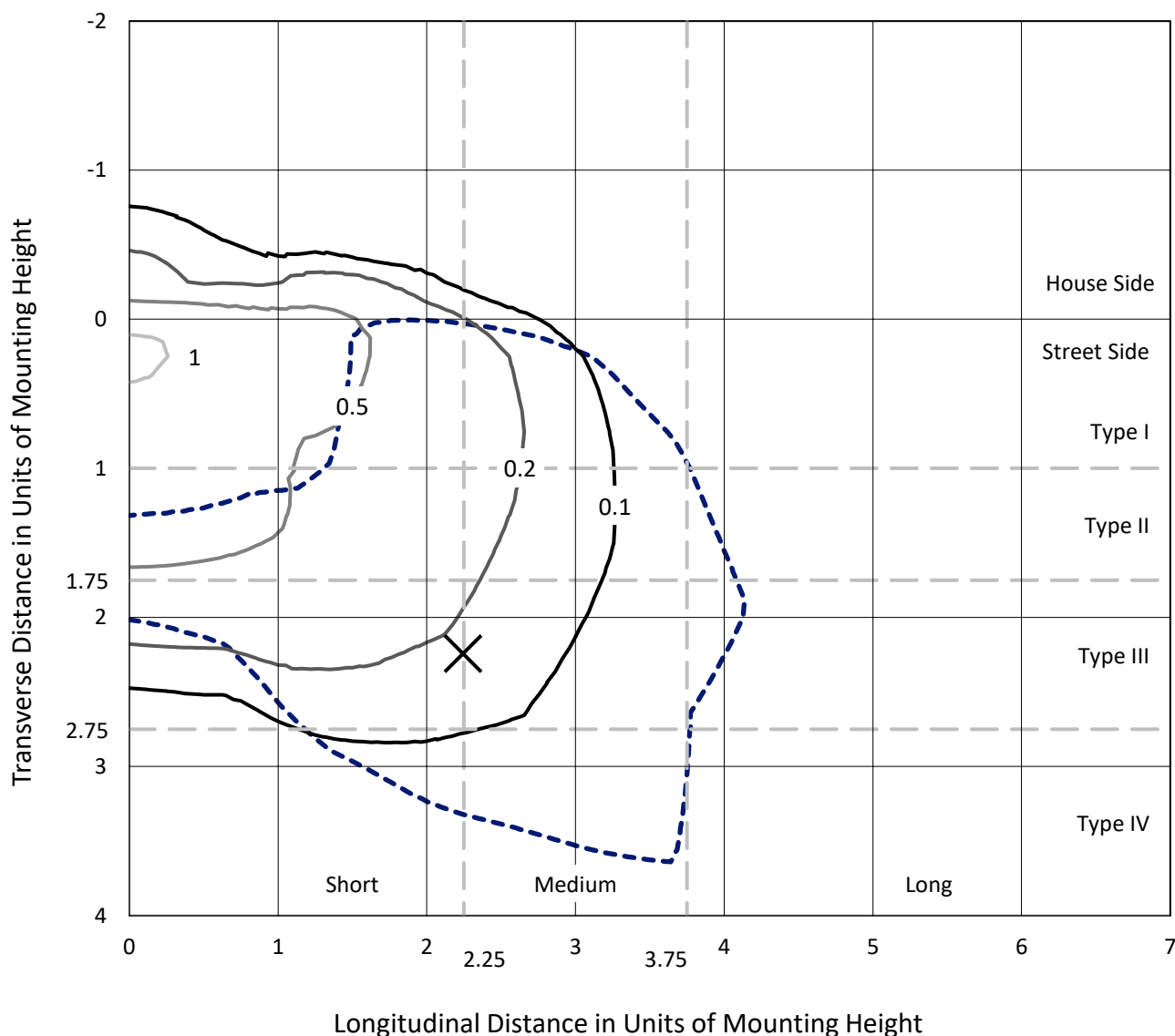
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

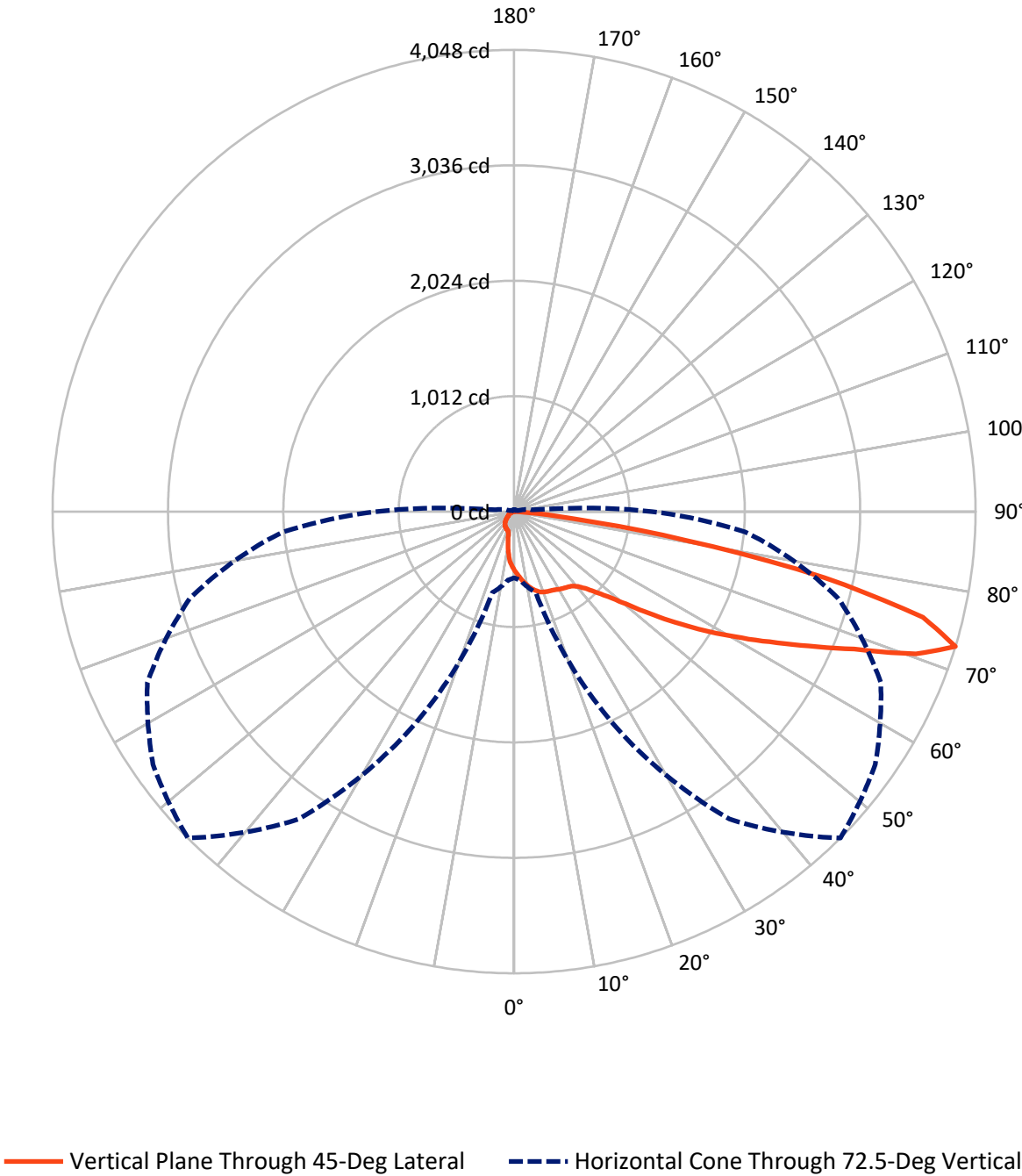


Based on 25 foot mounting height. Maximum calculated value = 1.1 fc

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	494.3	0.0	494.3
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	4210.4	0.0	4210.4
	% Fixture	89.5	0.0	89.5
Total	Lumens	4704.8	0.0	4704.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.6	1.0
10°-20°	141.9	3.0
20°-30°	233.1	5.0
30°-40°	330.5	7.0
40°-50°	546.3	11.6
50°-60°	981.5	20.9
60°-70°	1362.8	29.0
70°-80°	988.5	21.0
80°-90°	71.5	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°	4704.8	100.0
0°-180°	4704.8	100.0

Coefficient of Utilization



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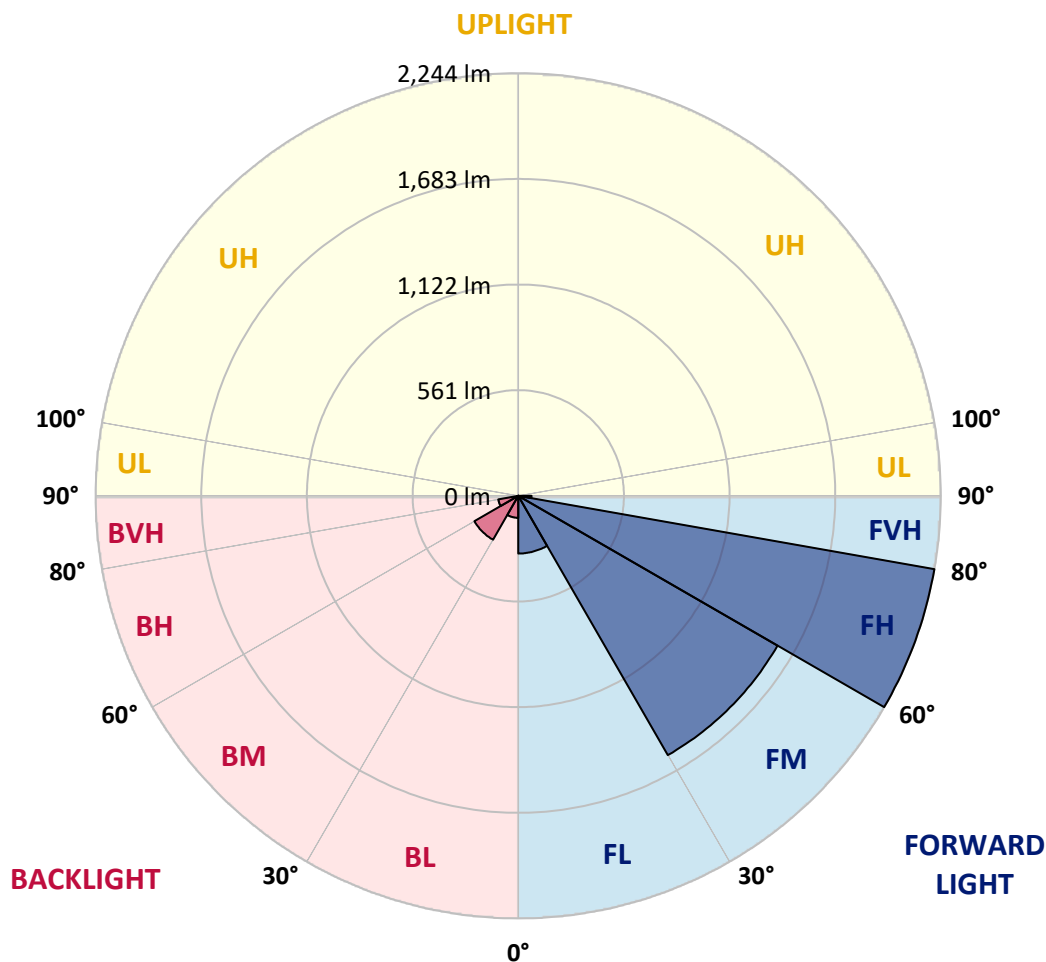
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	306.5	6.5			
FM	(30°-60°)	1589.5	33.8			
FH	(60°-80°)	2243.6	47.7			G2/5000
FVH	(80°-90°)	70.9	1.5			G1/100
BL	(0°-30°)	117.1	2.5	B1/500		
BM	(30°-60°)	268.8	5.7	B1/1000		
BH	(60°-80°)	107.8	2.3	B0/110		G0/110
BVH	(80°-90°)	0.6	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°	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4
2.5°	562.9	564.0	563.2	559.4	553.0	549.5	547.6	541.1	536.9	529.5	521.8
5°	614.7	618.5	616.2	608.5	596.3	587.6	585.1	571.9	560.1	546.2	530.2
7.5°	669.5	671.5	667.3	657.3	640.9	626.2	623.9	605.7	586.7	565.5	543.7
10°	717.1	719.3	712.9	698.4	679.9	661.5	658.4	638.1	615.6	589.6	561.7
12.5°	756.9	759.1	750.8	733.5	712.9	693.9	690.7	669.5	644.8	615.9	581.3
15°	787.1	791.3	780.0	761.4	739.2	720.3	718.7	697.8	673.7	641.6	604.6
17.5°	804.7	808.9	798.4	775.8	756.9	740.9	738.9	721.6	699.2	668.3	627.5
20°	807.6	811.5	800.2	780.6	765.0	752.0	751.1	738.6	722.2	692.7	652.2
22.5°	799.0	803.8	793.6	777.8	766.9	760.1	758.8	751.7	742.4	717.4	675.4
25°	790.0	793.9	786.2	772.3	766.5	765.9	766.9	765.6	763.6	742.4	702.3
27.5°	789.4	793.6	784.8	771.7	768.4	775.2	776.1	782.3	783.9	765.3	728.4
30°	794.8	797.7	789.4	775.5	773.9	789.4	789.7	800.6	803.2	784.5	754.0
32.5°	806.7	809.9	801.6	781.4	779.1	800.6	801.6	816.0	820.2	805.0	780.9
35°	834.7	838.4	828.8	797.3	789.4	811.2	814.1	831.1	839.5	826.9	808.9
37.5°	904.3	893.1	879.9	829.8	812.8	827.9	832.7	852.6	867.4	852.9	842.3
40°	1077.4	1042.1	1001.0	885.1	853.9	863.6	867.4	887.2	907.5	893.4	888.3
42.5°	1337.2	1295.4	1229.3	1012.2	915.8	920.7	923.5	941.0	969.4	958.3	959.5
45°	1568.8	1553.6	1486.1	1229.3	1031.8	1008.0	1011.6	1020.6	1062.6	1058.4	1066.8
47.5°	1746.6	1738.0	1685.9	1478.5	1227.6	1115.0	1124.9	1129.1	1189.8	1204.6	1227.0
50°	1883.4	1880.3	1833.6	1700.1	1483.6	1272.6	1276.1	1267.2	1358.0	1394.7	1437.4
52.5°	2012.5	2023.5	1989.1	1905.9	1757.0	1479.2	1478.5	1436.1	1558.8	1614.0	1686.9
55°	2129.1	2132.9	2136.5	2115.9	2031.8	1714.2	1708.1	1638.8	1791.6	1848.8	1927.7
57.5°	2238.6	2240.2	2271.7	2313.7	2317.9	1966.6	1955.4	1872.2	2045.9	2086.7	2135.2
60°	2312.1	2319.6	2386.0	2502.8	2554.0	2227.0	2221.0	2136.2	2304.7	2323.7	2314.8
62.5°	2206.2	2251.1	2418.8	2650.6	2776.8	2515.8	2512.9	2433.2	2577.1	2561.7	2484.6
65°	1785.9	1861.9	2156.7	2750.5	2995.5	2838.1	2842.3	2757.6	2856.8	2806.7	2622.7
67.5°	1249.2	1329.5	1678.2	2758.5	3239.9	3216.8	3240.8	3107.9	3153.8	3041.5	2655.5
70°	863.9	905.3	1132.3	2585.8	3430.4	3738.3	3737.7	3538.2	3449.2	3148.4	2488.5
72.5°	581.0	602.4	735.4	2051.4	3290.4	4048.1	4029.6	3867.0	3548.9	2944.4	2033.1
75°	245.0	260.8	340.4	1152.8	2603.1	3703.6	3653.2	3417.5	3153.2	2318.5	1268.4
77.5°	77.7	84.5	134.3	412.7	1433.9	2783.9	2730.6	2134.3	2113.3	1163.2	463.7
80°	36.9	43.0	75.4	165.7	564.3	1514.1	1506.7	968.2	909.1	314.1	93.2
82.5°	16.1	19.0	41.7	88.7	252.5	540.2	551.0	329.4	272.6	119.1	28.6
85°	5.1	6.8	19.3	40.8	106.6	134.3	132.6	78.3	109.8	64.9	9.9
87.5°	0.0	0.0	6.5	9.3	11.0	7.7	8.7	6.8	30.5	17.9	3.5
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°	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4
2.5°	518.0	512.8	503.9	495.5	488.1	480.7	476.2	469.9	469.1	469.1	470.8
5°	521.5	513.2	497.1	480.1	460.5	441.9	423.2	405.3	399.4	395.3	397.3
7.5°	531.8	518.6	493.2	460.8	423.5	382.8	354.2	323.4	311.5	305.0	306.1
10°	546.5	528.6	490.1	433.2	372.8	317.2	276.5	243.1	230.2	224.8	224.8
12.5°	562.9	540.8	484.3	398.8	317.2	250.8	210.9	195.6	193.6	193.6	193.6
15°	582.5	555.6	474.3	358.3	259.1	198.4	184.3	185.0	186.9	188.2	188.2
17.5°	602.8	571.3	458.6	313.1	207.8	178.6	178.9	179.8	181.4	182.8	182.8
20°	624.6	587.0	437.7	265.0	178.2	172.8	173.7	174.7	176.0	176.6	176.9
22.5°	648.0	601.8	413.0	217.7	168.3	168.0	168.3	169.2	170.9	170.9	171.5
25°	673.1	618.2	384.7	183.4	163.2	163.2	163.8	164.4	165.7	165.7	166.0
27.5°	698.7	633.2	354.9	165.3	158.7	158.4	158.4	159.3	159.9	160.2	160.5
30°	727.0	651.0	325.0	161.5	155.1	153.5	152.5	153.1	153.9	154.2	154.8
32.5°	755.9	668.0	298.4	163.2	151.6	148.7	145.4	144.8	144.8	146.2	147.1
35°	788.0	686.5	277.8	168.6	149.6	141.7	136.5	133.6	133.9	135.8	136.8
37.5°	826.6	709.1	262.7	173.4	148.3	133.6	125.3	121.7	119.4	121.7	121.1
40°	877.0	742.1	251.7	177.2	146.8	124.2	113.1	107.2	103.1	104.3	103.7
42.5°	951.2	794.2	247.6	177.6	143.2	113.4	100.6	92.8	86.7	87.0	85.8
45°	1055.2	876.4	269.1	173.4	135.5	101.5	87.3	77.1	73.2	72.3	70.9
47.5°	1197.8	996.2	318.9	164.7	124.2	89.9	74.5	65.8	62.9	61.3	60.4
50°	1388.9	1149.9	374.1	155.1	113.1	79.0	63.9	58.4	56.5	54.9	54.6
52.5°	1610.5	1306.1	419.4	145.4	101.8	69.4	57.2	53.9	52.4	51.0	50.7
55°	1813.7	1413.6	416.9	135.2	90.9	61.7	52.4	50.4	48.5	47.3	46.5
57.5°	1940.3	1428.7	343.6	123.9	78.3	55.6	47.9	46.5	44.3	42.7	42.4
60°	1998.4	1342.6	240.9	109.2	65.8	49.8	43.0	42.4	39.5	37.2	36.6
62.5°	2009.0	1182.7	160.5	90.9	54.9	44.3	38.2	37.2	33.4	29.5	27.6
65°	1966.0	954.1	111.1	70.9	46.8	38.5	32.8	30.9	26.6	22.8	21.5
67.5°	1829.8	669.8	77.4	51.0	39.8	30.5	26.0	25.4	22.1	19.0	17.9
70°	1580.2	381.8	51.7	38.2	31.5	20.9	20.6	21.2	17.9	15.4	14.1
72.5°	1211.7	174.7	32.1	28.0	21.5	14.1	16.4	16.7	13.8	11.6	10.2
75°	713.2	74.8	20.2	17.9	11.0	9.3	11.9	12.2	9.3	7.4	6.5
77.5°	242.8	28.3	12.8	10.6	5.4	5.1	7.7	7.7	5.1	2.9	2.3
80°	55.2	10.6	6.5	4.2	2.6	2.3	2.6	2.3	1.3	0.3	0.0
82.5°	15.8	4.2	2.6	1.6	0.9	0.9	0.3	0.0	0.0	0.0	0.0
85°	4.5	1.9	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.9	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)