

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: P881950

Luminaire Tested: **NAV-SB1C-830-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881950  
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-SB1C-830-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD  
THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

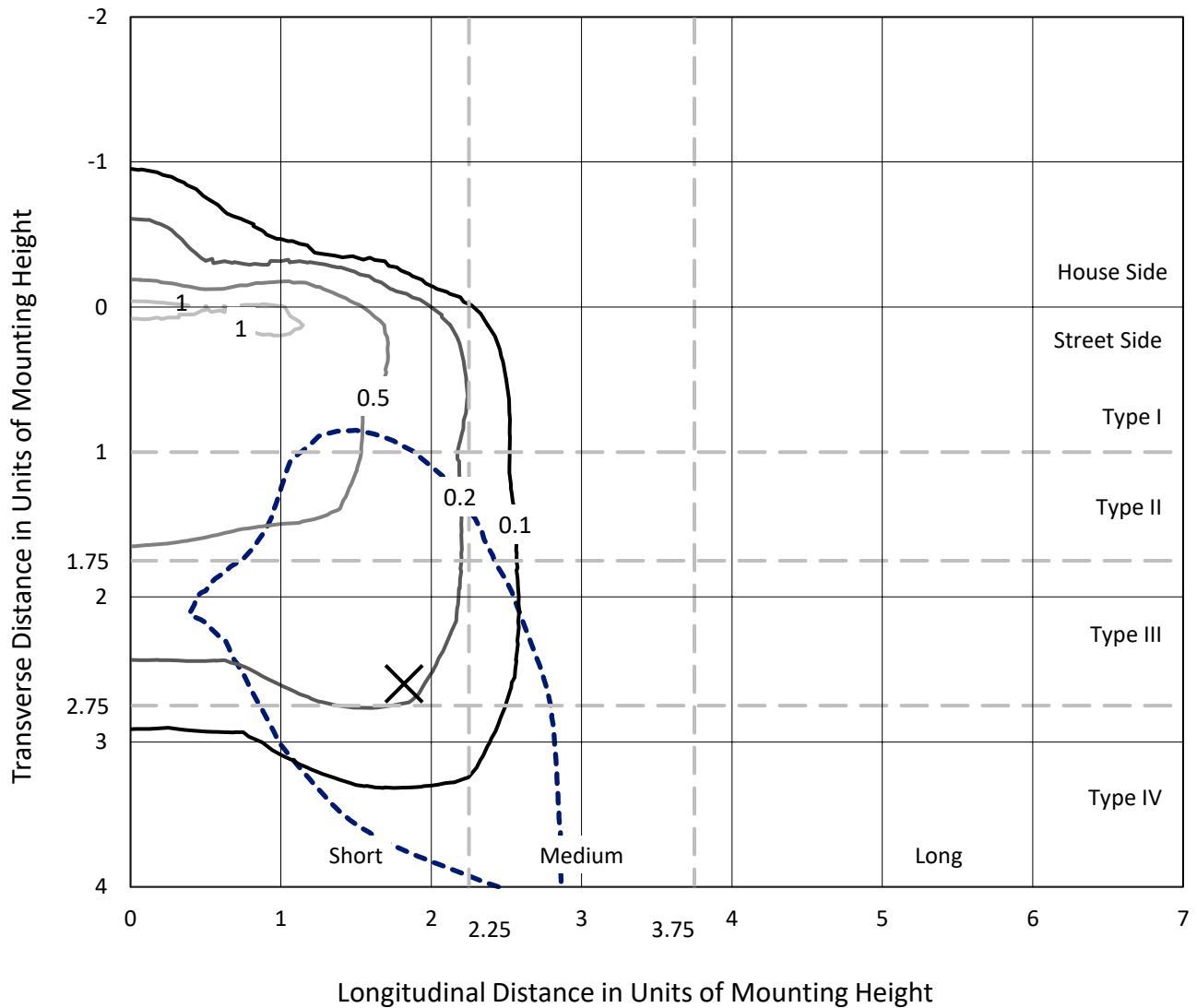
Lumens per Lamp: N/A  
Luminaire Lumens: 4966 lumens  
Efficiency: N/A  
Efficacy: 91.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 54.4  
Input Voltage (V): 120.0  
Input Current (Ain): 0.437  
Voltage Rise (V): NR  
Power Factor: 0.993  
Total Harmonic Distortion (THDi): 9.314  
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

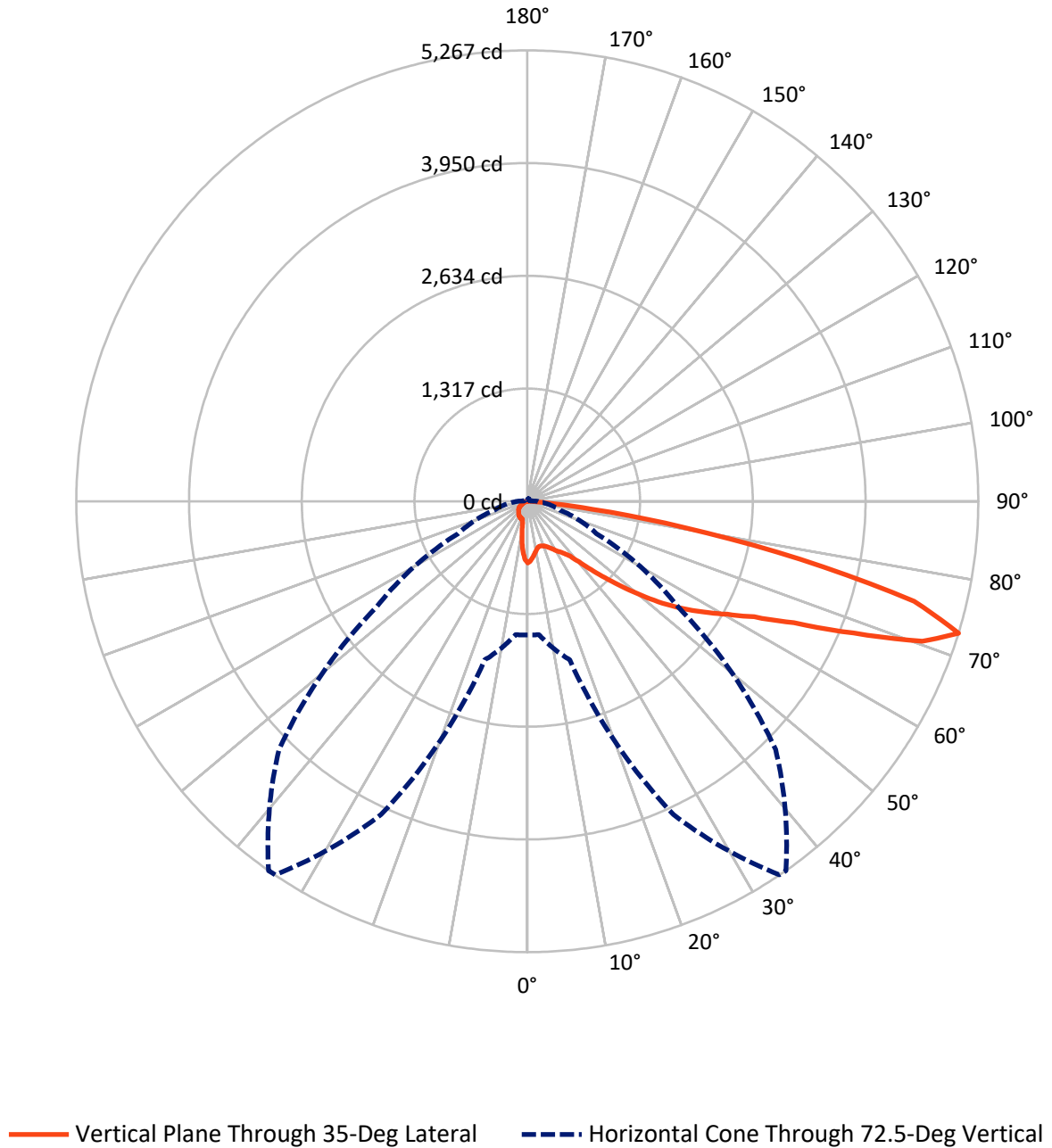
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	558.9	0.0	558.9
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	4407.1	0.0	4407.1
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	4966.0	0.0	4966.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.1	1.2
10°-20°	138.4	2.8
20°-30°	224.8	4.5
30°-40°	375.0	7.6
40°-50°	709.5	14.3
50°-60°	1127.4	22.7
60°-70°	1394.7	28.1
70°-80°	867.0	17.5
80°-90°	70.1	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°	4966.0	100.0
0°-180°	4966.0	100.0

**Coefficient of Utilization**



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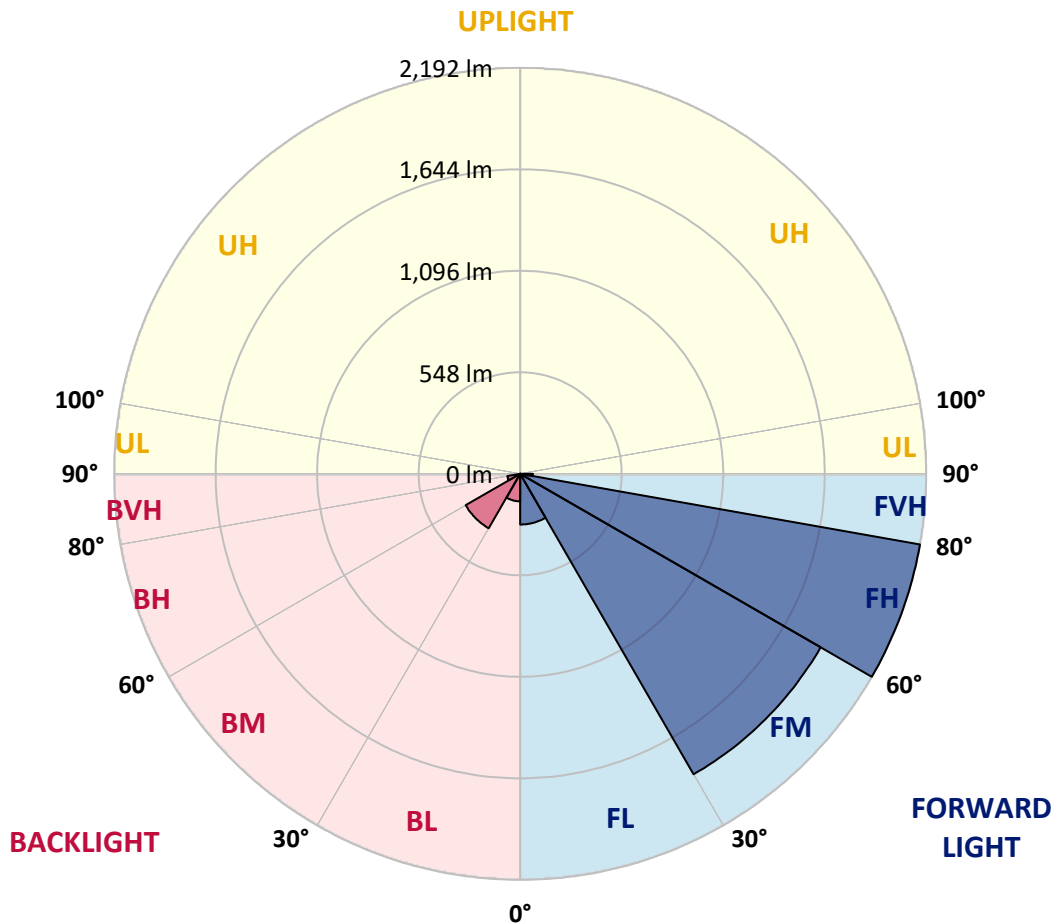
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	273.8	5.5			
FM (30°-60°)	1872.7	37.7			
FH (60°-80°)	2191.6	44.1			G2/5000
FVH (80°-90°)	69.1	1.4			G1/100
BL (0°-30°)	148.5	3.0	B1/500		
BM (30°-60°)	339.3	6.8	B1/1000		
BH (60°-80°)	70.1	1.4	B0/110		G0/110
BVH (80°-90°)	1.0	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°	719.7	719.7	719.7	719.7	719.7	719.7	719.7	719.7	719.7	719.7	719.7
2.5°	687.7	693.5	694.6	696.5	696.5	698.6	702.3	707.4	715.7	720.1	723.0
5°	633.9	638.2	643.7	648.1	656.4	657.5	671.7	685.5	704.8	719.4	729.6
7.5°	579.6	584.7	592.0	602.6	613.5	616.8	638.2	661.5	692.1	719.4	736.5
10°	541.4	541.8	548.4	558.9	576.4	580.4	606.6	639.7	677.9	715.0	743.0
12.5°	520.0	522.5	525.4	533.4	550.2	552.7	580.7	619.7	663.7	712.5	750.7
15°	520.0	521.8	523.6	527.6	541.1	543.3	568.0	606.9	656.4	713.6	763.0
17.5°	525.4	528.3	526.9	531.6	545.8	547.3	569.1	603.3	656.1	720.5	782.0
20°	538.5	540.7	537.8	540.7	554.9	557.8	580.4	610.2	662.2	732.5	805.6
22.5°	559.3	560.4	553.5	555.6	570.2	573.8	600.0	629.9	677.2	751.8	837.3
25°	585.5	587.7	577.1	579.6	593.5	597.8	628.0	659.3	700.8	778.3	877.7
27.5°	615.7	616.8	607.7	607.3	625.1	631.3	661.9	695.7	732.5	811.8	928.6
30°	650.2	653.5	644.8	643.3	665.9	671.0	701.2	740.5	779.1	862.0	1001.0
32.5°	677.5	680.1	675.0	678.6	701.5	705.5	748.8	803.8	852.2	933.3	1099.6
35°	716.8	718.3	706.6	713.2	739.4	749.6	814.0	892.6	944.2	1022.8	1228.4
37.5°	859.1	859.1	809.6	777.2	802.3	811.4	903.1	1004.3	1057.8	1142.9	1390.7
40°	1056.0	1052.7	980.3	914.0	910.8	928.6	1030.1	1145.1	1204.4	1287.0	1573.4
42.5°	1265.9	1260.8	1162.2	1096.7	1085.8	1092.0	1176.8	1318.7	1379.1	1462.8	1769.9
45°	1452.2	1450.8	1360.5	1272.5	1252.8	1272.5	1359.8	1521.7	1565.0	1653.1	1966.0
47.5°	1608.3	1608.3	1542.5	1485.0	1474.8	1486.4	1607.6	1747.0	1742.9	1855.7	2157.0
50°	1788.1	1786.6	1724.0	1699.3	1709.8	1726.2	1892.9	1984.2	1927.1	2054.8	2327.7
52.5°	1914.0	1922.7	1901.2	1897.2	1951.1	1979.5	2182.5	2216.3	2091.9	2243.6	2455.4
55°	2013.7	2023.9	2048.6	2076.6	2180.3	2217.4	2463.1	2436.5	2229.8	2407.4	2528.9
57.5°	2154.9	2140.3	2178.5	2233.8	2401.6	2446.3	2734.9	2644.3	2340.8	2540.2	2536.9
60°	2326.2	2328.4	2335.0	2404.8	2622.4	2679.9	3002.7	2840.8	2412.1	2621.7	2448.1
62.5°	2532.2	2535.5	2548.9	2656.3	2919.0	2973.2	3288.0	3001.6	2444.9	2598.8	2218.9
65°	2518.0	2531.8	2682.1	3049.3	3369.8	3423.3	3620.9	3114.4	2395.4	2389.2	1806.6
67.5°	2293.9	2316.4	2567.8	3518.6	4049.5	4109.2	4023.3	3136.6	2181.8	1857.9	1178.6
70°	1999.8	2007.8	2310.2	3940.7	4836.6	4897.0	4383.6	2892.4	1655.6	1036.3	528.0
72.5°	1561.7	1563.6	1918.3	4038.6	5263.8	5267.1	4100.8	2147.2	890.4	398.1	183.4
75°	1115.6	1104.7	1284.8	3275.2	4631.0	4668.1	3074.4	1007.2	340.2	188.1	91.3
77.5°	598.2	610.2	727.0	1942.4	3199.2	3262.5	1677.5	290.4	173.2	128.1	60.4
80°	184.8	195.0	298.0	889.3	1812.1	1850.3	621.9	129.2	120.8	91.3	39.7
82.5°	58.2	60.4	139.0	373.7	752.1	769.6	180.1	73.1	82.6	60.4	23.3
85°	16.7	17.1	61.9	139.4	185.9	189.6	50.6	28.4	47.3	37.5	12.0
87.5°	1.8	5.8	23.3	23.3	16.4	16.0	5.5	6.2	13.5	4.7	2.2
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°	719.7	719.7	719.7	719.7	719.7	719.7	719.7	719.7	719.7	719.7	719.7
2.5°	721.2	721.6	716.8	708.8	700.1	692.8	683.7	676.4	671.3	669.9	672.4
5°	726.3	723.7	710.3	685.9	656.8	631.7	603.7	581.5	566.9	560.7	562.9
7.5°	733.9	726.7	697.2	649.1	593.5	544.0	493.8	454.8	430.1	417.7	419.5
10°	740.5	725.9	675.3	596.0	510.9	435.9	368.2	321.3	295.1	282.7	283.1
12.5°	746.7	725.6	647.0	533.1	417.7	326.0	263.1	239.8	232.5	230.0	229.2
15°	758.3	726.7	611.3	461.0	324.9	246.3	223.4	223.1	224.5	223.8	223.4
17.5°	774.3	727.7	570.9	384.6	250.7	217.2	216.1	219.4	221.6	220.5	220.1
20°	795.1	732.1	528.0	308.9	215.4	210.0	212.5	215.4	217.2	215.4	215.0
22.5°	824.2	739.8	481.0	248.2	204.1	205.6	207.8	211.0	212.9	210.3	210.0
25°	859.8	751.8	434.8	215.8	198.7	200.5	203.8	207.4	209.6	207.0	206.7
27.5°	906.0	771.0	392.3	208.5	193.2	194.3	199.0	204.5	207.4	204.1	204.1
30°	973.0	802.7	355.5	211.8	189.9	187.4	193.9	201.6	204.9	201.9	201.6
32.5°	1061.8	847.5	332.9	216.9	188.5	179.4	185.6	195.4	200.9	199.0	199.0
35°	1178.2	915.5	324.2	222.7	187.4	171.0	175.4	185.9	195.4	197.2	197.2
37.5°	1319.4	1010.1	326.8	225.2	184.1	164.1	166.3	175.4	187.8	193.6	195.0
40°	1479.9	1120.4	341.3	222.7	180.5	158.3	158.6	165.6	176.5	185.2	188.1
42.5°	1645.4	1249.2	368.2	213.2	177.2	153.2	152.1	156.8	164.1	170.3	172.8
45°	1803.0	1381.6	394.8	200.1	173.2	148.1	145.5	147.4	148.8	151.4	152.8
47.5°	1940.5	1474.8	387.2	188.1	167.7	142.3	137.9	137.2	132.8	132.4	132.1
50°	2035.5	1495.2	343.9	176.1	159.7	135.7	128.8	124.4	116.8	113.2	113.5
52.5°	2065.7	1414.7	280.9	164.1	146.6	127.0	117.2	110.3	100.8	97.5	97.2
55°	2025.7	1257.2	224.5	149.6	128.4	115.3	104.4	95.3	87.7	83.7	83.7
57.5°	1927.8	1056.7	177.6	132.4	109.2	102.2	91.3	82.2	75.7	71.7	71.0
60°	1765.5	839.1	140.5	112.1	93.2	88.1	76.8	71.0	65.1	60.4	59.3
62.5°	1519.2	598.9	110.3	88.8	77.9	72.0	65.5	61.1	54.2	47.7	46.6
65°	1185.5	366.4	85.1	65.1	62.6	59.7	55.7	51.7	43.3	36.8	35.7
67.5°	747.8	173.6	60.8	49.1	49.5	48.0	46.2	42.9	36.8	30.9	30.2
70°	329.3	84.1	40.0	37.5	36.8	36.8	38.2	37.1	31.3	25.8	24.7
72.5°	112.1	45.1	29.8	28.4	26.6	26.2	32.0	30.9	25.1	20.0	18.9
75°	58.6	30.2	21.8	20.4	16.0	19.3	25.5	24.0	17.8	13.1	12.0
77.5°	38.2	21.5	14.9	13.1	9.1	12.7	18.9	16.7	10.6	6.5	5.8
80°	24.0	14.2	8.7	6.2	4.4	6.9	10.2	7.3	4.0	1.5	1.1
82.5°	12.7	7.3	3.3	2.2	1.8	2.2	2.5	1.8	0.7	0.0	0.0
85°	5.1	2.5	1.1	0.7	0.4	0.0	0.7	0.4	0.0	0.0	0.0
87.5°	1.8	0.4	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)