

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: McGRAW-EDISON

Report Number: P833192

Luminaire Tested: **TTN-D1-740-U-CQ-UPL2**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P833192  
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G3-2308-121-4) AND  
Test Lab: INNOVATION CENTER  
Issue Date: 5/15/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TTN-D1-740-U-CQ-UPL2  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
4000K, 70 CRI LEDS AND CONCENTRATED DISTRIBUTION  
Light Source: -  
Ballast/Driver: -

**Summary**

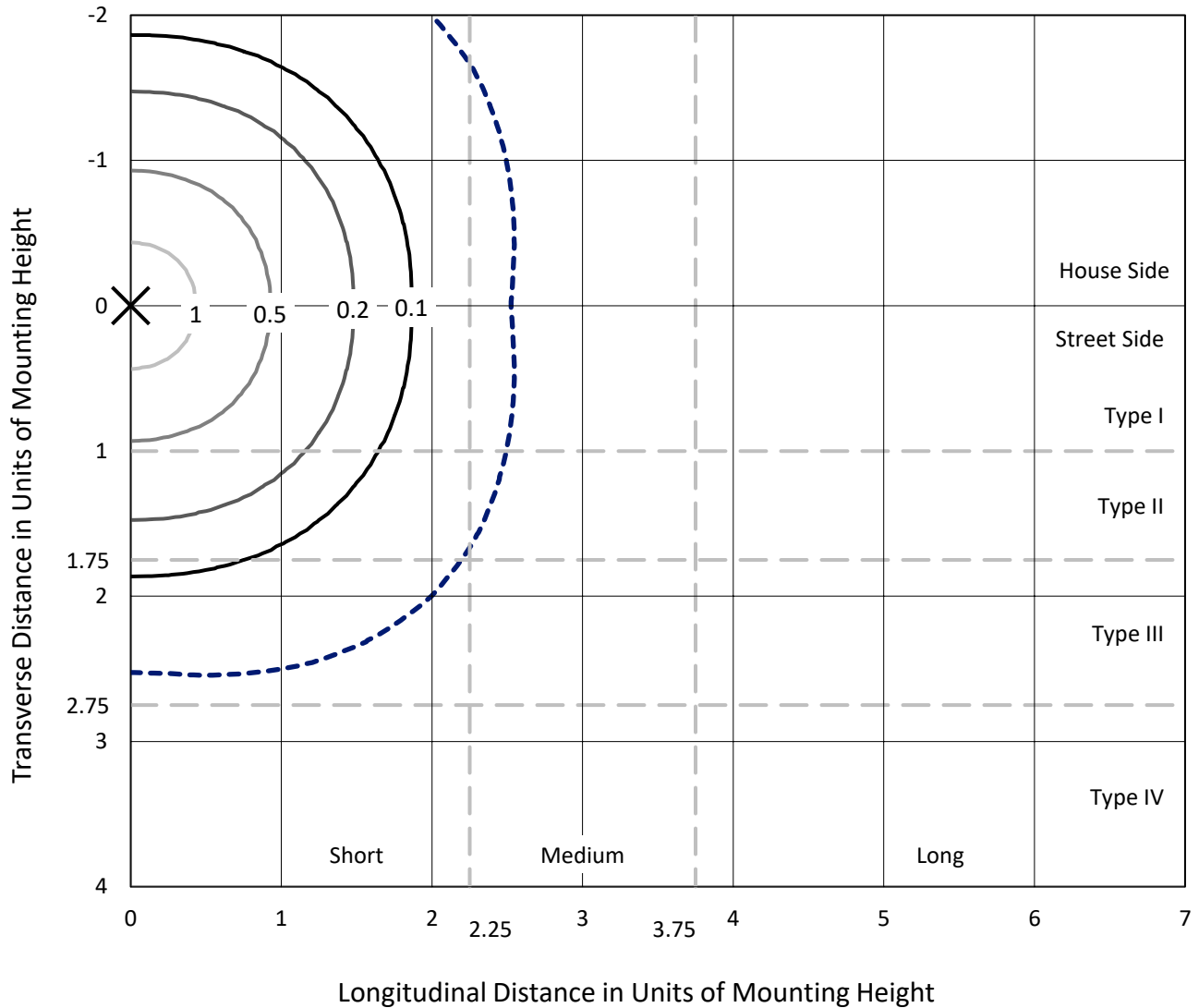
Lumens per Lamp: N/A  
Luminaire Lumens: 3965.7 lumens  
Efficiency: N/A  
Efficacy: 128.3 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B1 - U4 - G1  
  
Input Watts (W): 30.9  
Input Voltage (V): NR  
Input Current (Ain): 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

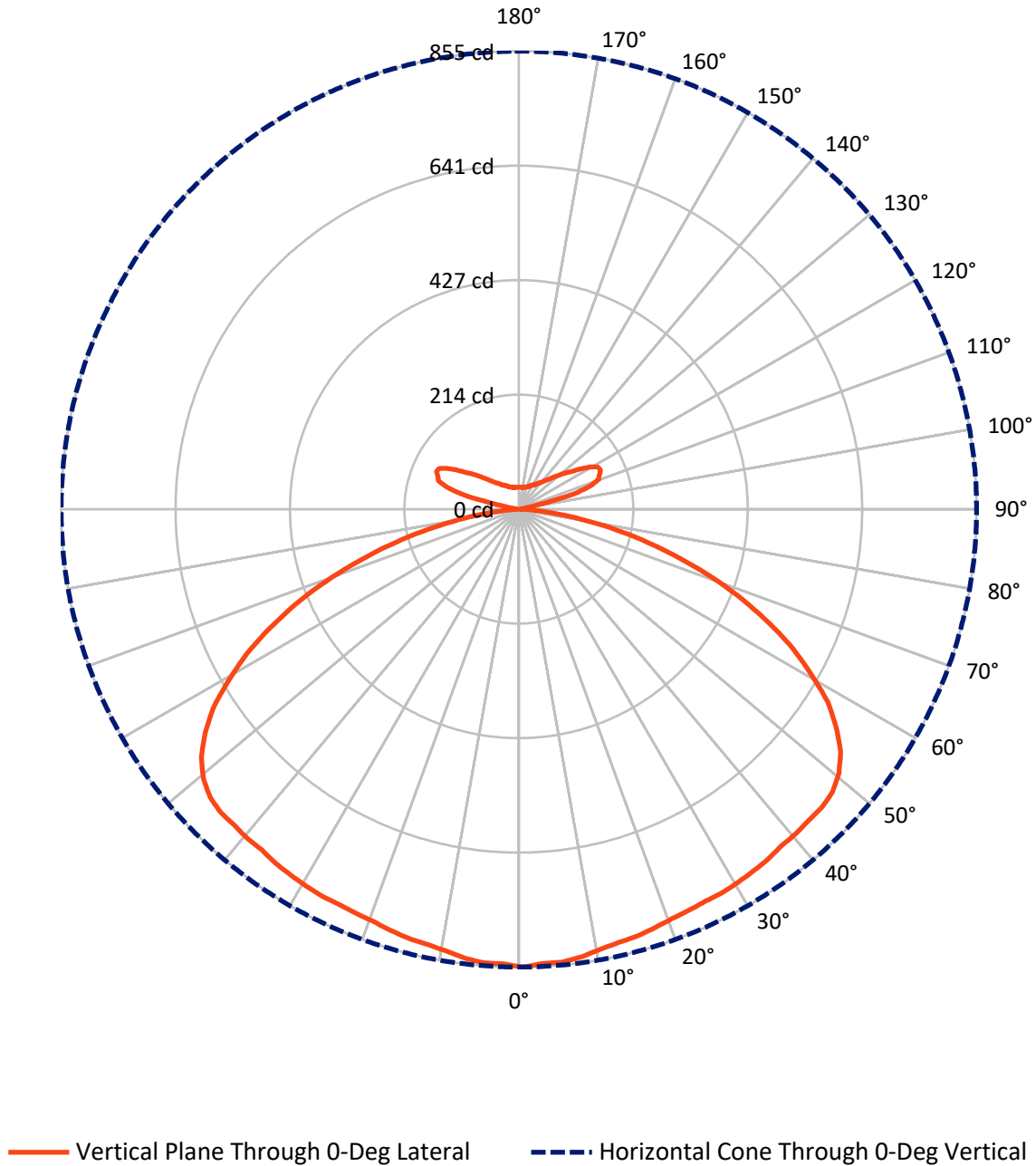
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



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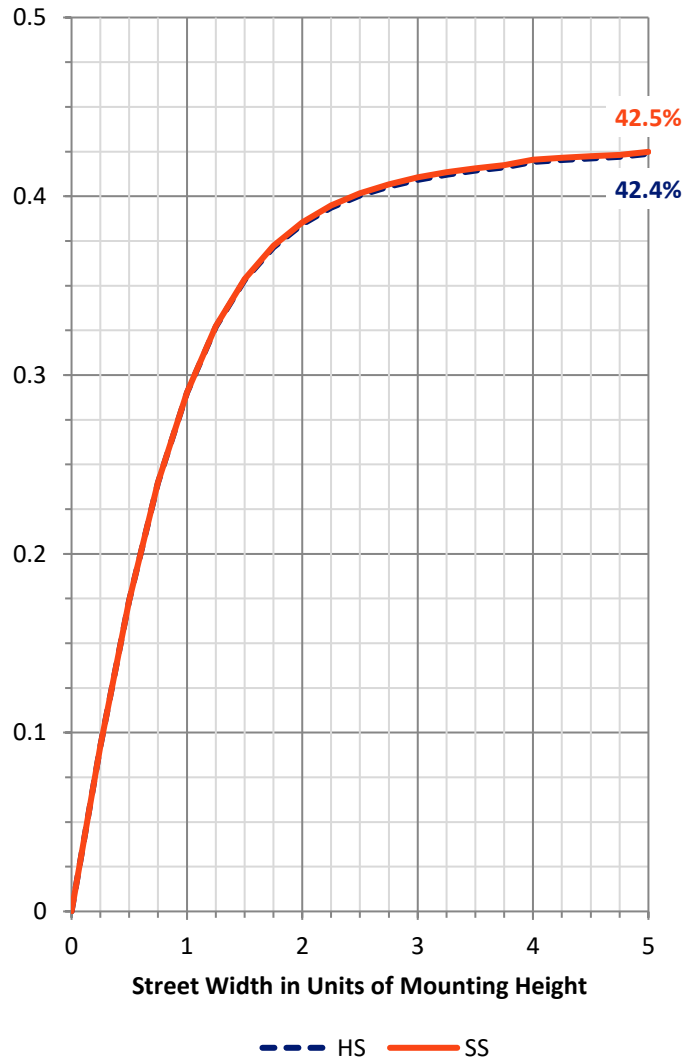
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1690.4	292.5	1982.8
	% Fixture	42.6	7.4	50.0
<b>Street Side</b>	Lumens	1690.4	292.5	1982.8
	% Fixture	42.6	7.4	50.0
<b>Total</b>	Lumens	3380.8	584.9	3965.7
	% Fixture	85.3	14.7	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.6	2.0
10°-20°	234.0	5.9
20°-30°	376.8	9.5
30°-40°	506.8	12.8
40°-50°	625.3	15.8
50°-60°	670.9	16.9
60°-70°	544.0	13.7
70°-80°	288.3	7.3
80°-90°	54.1	1.4
90°-100°	13.1	0.3
100°-110°	132.7	3.3
110°-120°	194.0	4.9
120°-130°	112.6	2.8
130°-140°	59.7	1.5
140°-150°	35.4	0.9
150°-160°	21.8	0.5
160°-170°	11.9	0.3
170°-180°	3.9	0.1
0°-90°	3380.8	85.3
0°-180°	3965.7	100.0



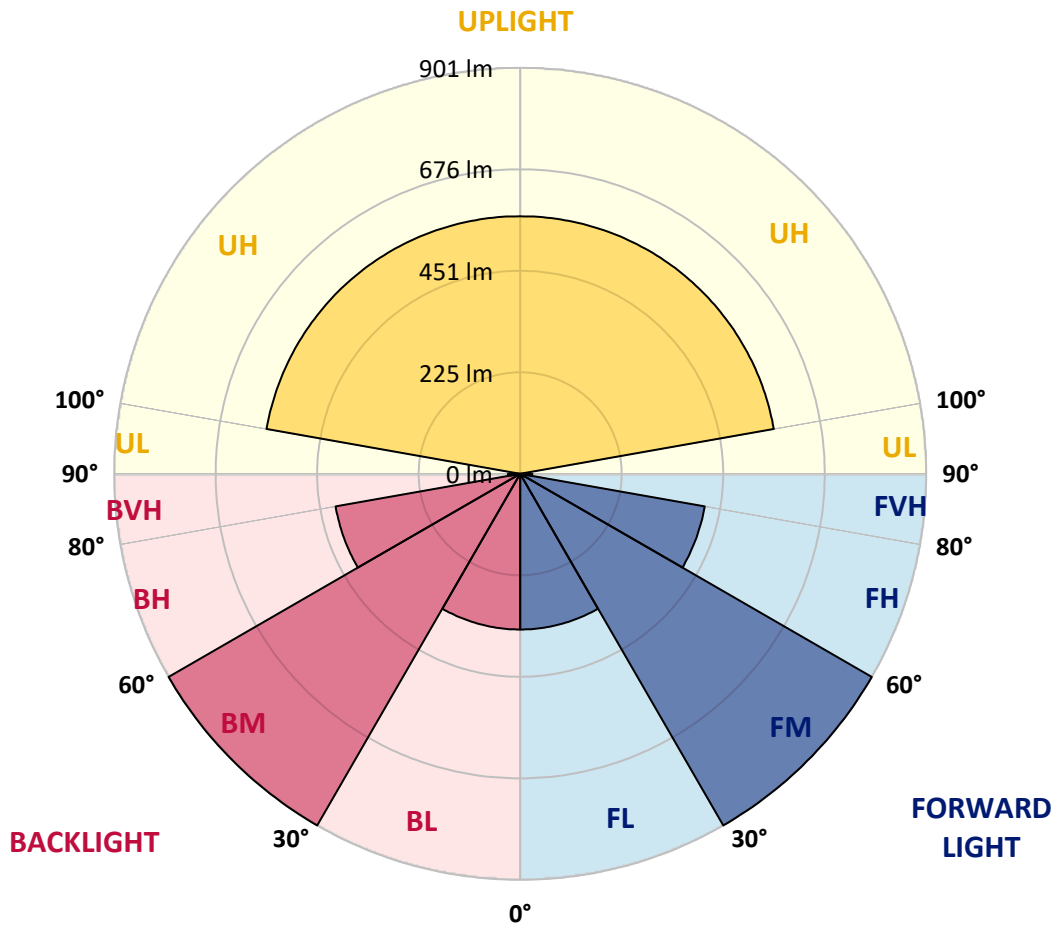
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	345.7	8.7			
FM (30°-60°)	901.5	22.7			
FH (60°-80°)	416.2	10.5			G0/660
FVH (80°-90°)	27.1	0.7			G1/100
BL (0°-30°)	345.7	8.7	B1/500		
BM (30°-60°)	901.5	22.7	B1/1000		
BH (60°-80°)	416.2	10.5	B1/500		G0/660
BVH (80°-90°)	27.1	0.7			G1/100
UL (90°-100°)	13.1	0.3		U2/50	
UH (100°-180°)	571.8	14.4		U4/1000	

**BUG Rating: B1-U4-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	854.7	854.7	854.7	854.7	854.7	854.7	854.7	854.7	854.7	854.7	854.7
2.5°	849.1	849.1	849.1	849.1	849.1	849.1	849.1	849.1	849.1	849.1	851.9
5°	849.1	849.1	849.1	849.1	846.4	849.1	849.1	849.1	849.1	849.1	849.1
7.5°	843.6	843.6	843.6	843.6	843.6	843.6	843.6	843.6	843.6	843.6	843.6
10°	835.3	835.3	835.3	835.3	835.3	835.3	835.3	835.3	835.3	835.3	835.3
12.5°	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8
15°	827.0	827.0	827.0	827.0	827.0	827.0	827.0	827.0	827.0	824.3	824.3
17.5°	821.5	821.5	821.5	821.5	824.3	824.3	824.3	821.5	821.5	821.5	821.5
20°	816.0	816.0	816.0	818.7	818.7	818.7	818.7	818.7	816.0	816.0	816.0
22.5°	813.2	813.2	813.2	813.2	816.0	816.0	816.0	816.0	813.2	813.2	813.2
25°	810.4	810.4	813.2	813.2	816.0	816.0	816.0	813.2	813.2	810.4	810.4
27.5°	810.4	810.4	813.2	813.2	816.0	816.0	816.0	816.0	813.2	810.4	810.4
30°	807.7	810.4	810.4	813.2	816.0	816.0	816.0	813.2	810.4	807.7	807.7
32.5°	804.9	804.9	807.7	810.4	813.2	813.2	813.2	810.4	807.7	804.9	802.1
35°	802.1	802.1	802.1	807.7	810.4	810.4	810.4	807.7	802.1	799.4	799.4
37.5°	796.6	799.4	802.1	804.9	810.4	810.4	810.4	804.9	799.4	796.6	793.8
40°	796.6	796.6	802.1	804.9	813.2	813.2	810.4	804.9	799.4	793.8	791.1
42.5°	793.8	796.6	802.1	810.4	818.7	818.7	816.0	807.7	799.4	793.8	791.1
45°	793.8	793.8	802.1	813.2	824.3	827.0	821.5	813.2	802.1	791.1	791.1
47.5°	788.3	788.3	799.4	813.2	827.0	829.8	827.0	813.2	799.4	791.1	788.3
50°	774.5	774.5	788.3	804.9	821.5	827.0	821.5	810.4	791.1	780.0	777.2
52.5°	752.3	752.3	766.2	788.3	804.9	813.2	807.7	793.8	774.5	757.9	755.1
55°	719.1	721.9	735.7	760.6	780.0	788.3	782.8	766.2	744.0	727.4	721.9
57.5°	680.4	680.4	699.8	724.7	744.0	752.3	746.8	730.2	705.3	688.7	683.2
60°	627.9	630.6	647.2	680.4	699.8	708.1	702.6	683.2	655.5	636.2	630.6
62.5°	575.3	578.1	594.7	622.3	644.5	650.0	644.5	625.1	600.2	580.9	575.3
65°	514.5	517.2	536.6	561.5	578.1	586.4	578.1	561.5	539.4	520.0	517.2
67.5°	450.9	453.6	473.0	495.1	511.7	517.2	508.9	495.1	473.0	456.4	450.9
70°	384.5	387.2	403.8	423.2	437.0	442.6	437.0	420.4	403.8	387.2	384.5
72.5°	315.3	318.1	334.7	351.3	362.3	367.9	359.6	348.5	331.9	318.1	315.3
75°	248.9	248.9	262.8	276.6	287.7	290.4	284.9	276.6	262.8	251.7	246.2
77.5°	185.3	185.3	199.1	207.4	213.0	218.5	213.0	204.7	196.4	185.3	185.3
80°	124.5	124.5	135.5	141.1	146.6	149.4	146.6	141.1	135.5	127.2	124.5
82.5°	74.7	74.7	80.2	85.7	85.7	88.5	88.5	85.7	80.2	74.7	74.7
85°	33.2	30.4	36.0	38.7	38.7	41.5	41.5	38.7	36.0	33.2	33.2
87.5°	2.8	5.5	5.5	8.3	8.3	8.3	8.3	8.3	5.5	5.5	5.5
90°	5.0	5.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.0	5.0
92.5°	5.0	5.0	5.0	7.0	8.0	7.0	8.0	6.0	6.0	5.0	5.0
95°	6.0	6.0	7.0	9.0	11.0	12.0	12.0	7.0	7.0	6.0	6.0
97.5°	8.0	9.0	9.0	11.0	18.0	33.0	20.0	10.0	10.0	9.0	8.0
100°	13.0	14.0	14.0	25.0	53.0	71.1	51.0	26.0	19.0	14.0	14.0
102.5°	42.0	44.0	54.0	81.1	120.1	109.1	92.1	87.1	60.0	48.0	46.0
105°	107.1	106.1	114.1	135.1	168.1	165.1	152.1	138.1	119.1	110.1	110.1
107.5°	141.1	141.1	148.1	166.1	191.1	223.2	226.2	179.1	157.1	147.1	146.1
110°	159.1	159.1	165.1	180.1	213.2	258.2	256.2	221.2	194.1	181.1	179.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	163.1	164.1	172.1	195.1	231.2	251.2	242.2	228.2	216.2	206.2	204.2
115°	169.1	169.1	178.1	200.2	220.2	228.2	218.2	207.2	199.2	195.1	197.1
117.5°	167.1	170.1	172.1	184.1	197.1	203.2	198.1	183.1	177.1	175.1	172.1
120°	155.1	155.1	157.1	163.1	170.1	173.1	171.1	161.1	156.1	155.1	153.1
122.5°	138.1	139.1	138.1	141.1	146.1	149.1	147.1	139.1	137.1	137.1	135.1
125°	121.1	121.1	120.1	122.1	125.1	124.1	125.1	121.1	120.1	120.1	119.1
127.5°	109.1	108.1	106.1	107.1	108.1	108.1	109.1	105.1	106.1	107.1	106.1
130°	97.1	97.1	95.1	95.1	95.1	93.1	95.1	93.1	94.1	95.1	96.1
132.5°	86.1	86.1	83.1	82.1	82.1	82.1	83.1	82.1	84.1	86.1	86.1
135°	77.1	77.1	74.1	75.1	75.1	74.1	75.1	74.1	76.1	77.1	77.1
137.5°	70.1	70.1	68.1	68.1	68.1	67.1	68.1	68.1	69.1	71.1	72.1
140°	64.0	64.0	63.0	63.0	62.0	63.0	63.0	63.0	64.0	65.0	65.0
142.5°	61.0	60.0	59.0	58.0	59.0	59.0	59.0	58.0	59.0	61.0	61.0
145°	56.0	56.0	55.0	55.0	55.0	56.0	55.0	55.0	56.0	56.0	57.0
147.5°	53.0	53.0	52.0	53.0	53.0	53.0	53.0	52.0	53.0	53.0	54.0
150°	52.0	51.0	50.0	51.0	51.0	50.0	50.0	50.0	50.0	51.0	51.0
152.5°	49.0	49.0	48.0	49.0	48.0	48.0	48.0	48.0	48.0	49.0	50.0
155°	47.0	47.0	46.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0
157.5°	45.0	46.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	46.0	46.0
160°	44.0	44.0	44.0	44.0	43.0	43.0	43.0	44.0	44.0	44.0	45.0
162.5°	43.0	43.0	43.0	43.0	42.0	42.0	42.0	42.0	43.0	43.0	44.0
165°	43.0	42.0	42.0	42.0	41.0	41.0	41.0	41.0	42.0	43.0	42.0
167.5°	41.0	41.0	41.0	41.0	41.0	40.0	40.0	41.0	41.0	41.0	42.0
170°	41.0	41.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	41.0
172.5°	41.0	41.0	41.0	41.0	40.0	40.0	40.0	40.0	40.0	41.0	41.0
175°	41.0	41.0	41.0	41.0	40.0	40.0	40.0	41.0	41.0	41.0	40.0
177.5°	41.0	41.0	41.0	41.0	40.0	41.0	41.0	41.0	41.0	41.0	41.0
180°	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0

(END OF REPORT)